SUPREME COURT OF THE UNITED STATES

OCTOBER TERM, 1933

No. 868

STATE OF OHIO, PUBLIC UTILITIES COMMISSION OF OHIO, THE WHEELING AND LAKE ERIE RAILWAY COMPANY ET AL., APPELLANTS,

vs.

THE UNITED STATES OF AMERICA, INTERSTATE COMMERCE COMMISSION, THE BALTIMORE AND OHIO RAILROAD COMPANY, ET AL.

No. 886

THE UNITED STATES OF AMERICA, INTERSTATE COMMERCE COMMISSION, THE PUBLIC SERVICE COMMISSION OF THE COMMONWEALTH OF PENNSYLVANIA, ET AL., APPELLANTS,

vs.

STATE OF OHIO, PUBLIC UTILITIES COMMISSION OF OHIO, THE WHEELING AND LAKE ERIE RAILWAY COMPANY, ET AL.

APPEALS FROM THE DISTRICT COURT OF THE UNITED STATES FOR THE SOUTHERN DISTRICT OF OHIO

VOL. II.

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The approximate annual production of the Williamson Field normally is about 10,000,000 tons, but in 1932 it will not be more than 6,500,000 tons.

(631) Our association represents 76 per cent of the total commercial production of this field. There is 24 per cent of total production not in the association, and in addition there is some captive tonnage produced in the field.

We ship quite a considerable tonnage from the Williamson Field to Akron, Canton, Cleveland, Lorain, and Masillon. The following figures cover the entire Kenova-Thacker field. To the five points named the total tonnage for 1929 aggregated 275,156 tons; for the year 1930, 166,858 tons; [fol. 1238] for the year 1931, 55,015 tons; for the first ten months of 1932, 36,566 tons. These figures represent a loss over 1929 in the first ten months of this year of 84 per cent.

The members of our association also ship a considerable tonnage to points north and east of a line drawn through Springfield, Dayton, and Columbus, and north to Lorain and Toledo. (632) Our sales into that territory have decreased from 768,379 tons in 1929 to 576,163 tons in 1930, 321,553 in 1931, and 242,575 tons during the first nine months of this year. These figures include the tonnage shipped to the five points I have named already, namely, Akron, Canton, Cleveland, Lorain, and Massillon.

The decrease over 1929 and the first nine months of this year amounted to 57.9 per cent. That includes those five districts. Excluding those five destinations, the decrease was 43.9 per cent.

The decreased business from the Williamson Field to the larger territory is very much less than the decrease to the five points I have designated specifically. The loss to the five points of Akron, Canton, Cleveland, Lorain, and Massillon is very much greater, amounting to approximately 84 per cent. (633) I attribute this latter loss of 84 per cent during the four year period to the intense competition of Ohio coal. The Ohio producers have been preparing their coal better during that period and they have also succeeded [fol. 1239] in securing a lower labor cost by way of wage adjustments and, of couse, they have always had a great advantage over us on freight rates. Our rate to all five of the points named is $2.39 per ton, while the Number 8 rate

to Cleveland was $1.74 and the Hocking rate to Cleveland was $1.89. This competition has been made more intense by reason of the reduction of the Ohio rates to $1.45 from No. 8 to Cleveland, for example, and $1.60 from Hocking, thereby increasing our freight handicap to 94 cents in the case of Number 8 and 79 cents in the case of Hocking.

The period covered by the recent Ohio reductions has been too short to enable us to say definitely what tonnage those reductions have caused us to lose. We do know that the old differences in the rates, of 65 cents over Number 8 and 50 cents over Hocking, have enabled the Ohio producers to undersell us and displace our coal, and have caused the great losses of tonnage to which I have testified during the entire four year period. With the additional advantage the Ohio producers (634) have by reason of the spreading of the handicap against us from 65 cents to 94 cents from Number 8 and from 50 cents to 79 cents in the case of Hocking, we feel that we will not be able to sell any considerable tonnage in this territory at all. In fact, even if the old differences of 65 cents and 50 cents are restored, we will have difficulty in regaining the business we have lost, because of the better preparation and lower wage costs of the Ohio producers.

[fol. 1240] Cross-examination.

By Mr. Bronson:

(634) I do not attribute the entire loss which dates from 1929 and 1930 to this reduction in the Ohio No. 8 and other Ohio rates to northeastern Ohio territory. The three causes I have stated: Partly, the differential in freight rates, partly because of the better preparation of the Ohio coal, and partly because of the more favorable wage rates in the Ohio Fields. (635) The general depression has a good deal to do with the loss of tonnage everywhere. While our entire field has lost about 35 per cent of its tonnage as a whole into this particular territory, northeastern Ohio, it has lost 57 per cent of its tonnage, while to the five points it has lost 84 per cent of its tonnage. I have been correctly understood to state that the Kenova-Thacker district shipped to Akron, Canton, Cleveland, Lorain, and Massillon in 1929, 275,158 tons, and for the year 1930, 166,858 tons, and in 1931,

55,015 tons. The same information which I have given appears on Exhibit 125 in connection with the Kenova-Thacker district for the years 1929, 1930 and 1931 to Akron, Canton, Massillon and Lorain.

By Mr. Burgess:

Q. In checking our figures shown on Exhibit No. 125 I find that the total tonnage you shipped to the Canton-Massillon group from Kenova-Thacker district in 1929 was 157,716 tons, and in 1931 only 3,751 tons, which accounts for practically the entire reduction which you show to the five destinations of northeastern Ohio?

A. (636) Oh yes, most of the reduction.

[fol. 1241] Q. Do you know why that reduction took place in the Canton-Massillon group?

A. Yes, from the three causes stated—the differential in freight rates existing at that time, better preparation of Ohio coal, and the more favorable wage rates.

I could not give any definite figures as to how much of the Kenova-Thacker district coal went into the plants of the Republic Iron & Steel Company in the Canton-Massillon groups in 1929 as compared with 1931. It was not a very large percentage from our field. It does not account for the reduction which I show to the Canton-Massillon group. Most of our tonnage going into that territory is domestic coal.

Q. In other words, you have from the Kenova-Thacker district into Canton and Massillon domestic coal shipments which practically account for a large percentage, if not the largest percentage of the shipments shown into Canton-Massillon in 1929?

A. Very largely so.

Q. And it was not coking coal?

A. A large percentage of it was not coking coal, a very large percentage. (637) I know from our own experience that we ship domestic coal only, and most of the tonnage is domestic coal from the field, very little metallurgical coal from that field.

By Mr. Herrold:

I do not recognize that the better coal preparation on the part of the Ohio mines results in a better grade of coal than ours, or we could not ship any with that differential. As to

[fol. 1242] wages, as a whole we do not pay more than they pay in the districts in general in Ohio.

The freight difference has been the same for many years, until August 1 of this year. It is true that the reduction in the shipments from our Williamson field to northeastern Ohio occurred before there was any reduction in the rates to northeastern Ohio.

By Mr. Ballard:

The greater part of the Williamson Field coal (638) is domestic coal. Most of the remaining would be by-product coal—practically no steam coal from that district can go in there on account of the differential already in existence. We have been excluded in steam.

The metallurgical tonnage would decline proportionately with the decline in the rate of operations in the steel industry; not entirely. I think it is correct to say that none of it would be due to the shift to Ohio. There is no metallurgical coal in Ohio.

(639) We ship three grades of domestic coal known as block, egg and stove sizes. The block is usually considered the coal over four inches in size, the egg between 2½ and 4 inches, and the stove between 1½ and 2 inches in size. Those three grades would be considered domestic coal. That is generally true of the entire field.

There are five different seams operated in that field, all of somewhat different characteristics. They do not produce five different kinds of coal, serving five different kinds of purposes. The coal from all five seams, a large percentage [fol. 1243] of it, the larger size, practically all goes for domestic purposes, the same purpose, while the slack, the finer sizes would vary. Some of it would be used for steam and others for metallurgical purposes.

(640) The 4-inch block domestic coal from this field is sold in northeastern Ohio under various trade names. The price at the mine of our trade name "Crystal Block" is $1.75. We consider that a better product than the others. We consider it as good as any other in the field. It brings $1.75 at the mines at the present time. In comparison with some of the other coals it is premium coal; it brings a higher price than some of the other seams of coal. (641) I do not know what that premium is today in northeastern Ohio to the retail consumer.

As to a coal that would be representative of the conditions in the field as a whole, we ship from the Winnifred seam, probably the largest tonnage from the seam is from the Thacker seam. That is usually sold as Thacker coal. It is 4-inch lump and brings approximately $1.25 in the mines today. It could not give the figure as to what it is bringing from the ultimate consumer in northeastern Ohio.

Some of the 2½-inch egg is domestic coal. In the Thacker seam in which we are operating at the present time the price of that at the mine is approximately $1.20 a ton. That is sold (642) in Cleveland under the trade name "Crystal Egg."

[fol. 1244] Practically all of the 1½-inch lump is domestic coal.

The Thacker egg price at the mine in comparison with our Crystal egg price at the present time is approximately $1.00. The Crystal stove is approximately 90 cents and the Thacker stove 75 cents.

(643) I intended to say that the current Ohio wage rates are lower than they used to be. They compare with our own very favorably. We have no standard wage scale in our field.

In making my statement about wages, I do not have information before me at present as to the range of rates for Ohio. I am speaking from general impressions obtained from time to time by reading the wage rates in Ohio. At the present time our wage scale is 40 cents an hour for inside labor—inside day labor. I can't say right now just what the inside rate is in Ohio. I know that from time to time (644) the wages in Ohio were being reduced, and I am led to the conclusion from that that the wage rate in that field is more favorable at the present time than it was two years ago.

Q. So that you don't know (645) furtherwith respect to wages than to say that the Ohio wages are lower today than they were four years ago, but you don't know how much?

A. That is correct. I can't give definite figures.

Q. You stated to Mr. Burgess that the figures you gave for Akron, Canton, Massillon, Cleveland and Lorain from [fol. 1245] the Williamson field for 1929, 1930 and 1931 and 1932 were just the same as the figures on Exhibit 125. Am I right in assuming that we can trace the trend of the movement by individual destinations and by years and by months

from that exhibit? and that those figures will be comparable with the figure you gave?

Mr. McVann: I will answer that, Mr. Ballard, by saying that you can, because the source of the figures is the same, except they are shown in greater detail on the Kennedy exhibit (646) than they are shown by Mr. Wood.

[fol. 1246] Testimony Taken at Columbus, Ohio, December 19, 1932

Direct examination of A. S. Boden (continued).

By Mr. Gutheim:

(647) I was asked a question Saturday with respect to the production experience of our members in recent years. And I am now asked whether the answer I gave was with respect to the production of our members or the shipment. The tonnages I mentioned dealt only with the actual shipments and not production:

Cross-examination.

By Mr. Bronson:

(648) I am asked whether, in measuring the reasonableness of the Pittsburgh rates, the average distances from the Pittsburgh district mines to Cleveland should be compared with the average distances from the Ohio No. 8 or the Cambridge or the combined Ohio No. 8 and Cambridge mines. Having in mind the testimony offered by previous witnesses, it would be my judgment that they should be compared with the average of No. 8 and Cambridge, for the reason that both take the same rate.

By Mr. Burgess:

Q. Mr. Boden, on your Exhibit No. 98 you show the line of the Bessemer & Lake Erie Railroad running through the Freeport district and then north through Butler and north to a point on Lake Erie. Is Butler on the Bessemer & Lake Erie in the Pittsburgh district or in some other rate district?

[fol. 1247] A. Technically, I think it is in the Butler-Mercer, but there are no mines right at Butler. The southern boundary of the Butler-Mercer district is on that part of the Bessemer indicated right here between the orange and the city of Butler proper.

(649) On my exhibit No. 99 I show the tonnage moving in 1930 from the Pittsburgh, Freeport and Connellsville districts to Youngstown and the Mahoning Valley as something over 5,000,000 tons. Of that the Freeport tonnage is 467,660.

On my exhibit 103 I show the average distance from Connellsville to Youngstown as 142 miles. That distance was figured by all tariff routes. I imagine if you figured the distance via the short tariff routes it would be slightly lower than that, quite possibly below 140.

On that same exhibit I show the distance from Cambridge to Youngstown via the route of the B. & O., as 223 miles. That route of the B. & O. from the Cambridge district to Youngstown is a rather circuitous route.

Q. And via all tariff routes, as you have (650) indicated on subsequent exhibits, including exhibit 106, the average distance is 135 miles from the Cambridge district to Youngstown?

A. 135 miles on the rate of $1.44.

Q. Via all tariff routes carrying the rate of $1.44?

A. Via all tariff routes, carrying the rate of $1.44, yes sir.

On my exhibit 106, the distances shown are the average distances via all tariff routes. I would say there would be [fol. 1248] considerable difference in the Pittsburgh distances there if the shortest tariff routes were used, that would be true to Youngstown, and Canton-Massillon, having in mind the entire district. That would also be true of the Freeport group to Youngstown if the short tariff route distance had been used alone.

(651) In using all tariff routes I used all the origin points in the tariffs, whether they were stations or mines. I understand that is what Mr. Kern stated he did.

[fol. 1249] Q. I note that to Canton you show an average distance from the Ohio No. 8 district of 76 miles, which is considerably less than my recollection of the average distance via all tariff routes from the origins shown in the tariff as computed by Mr. Kern in his Exhibit 33. I think Mr. Kern showed something like 87 miles or greater. The

only thing I am interested in, you actually did figure the distance via all tariff routes from all origin points shown in the Ohio No. 8 district to Canton?

A. Yes sir, and these figures probably will differ because of the fact that we have used the mines and not taking any differentiation between active and others. I did not compute my distances over tariff routes, that carried higher than the going rate. They carry the route only via which that rate applies, as shown opposite those distances. In other words, the 76 mile average distance is via the routes over which the rate of $1.08 is published from the Ohio No. 8 district to Canton.

(652) Q. Now when you come to the Middle district I note that you show an average distance to Canton of 47 miles on Exhibit 106, and checking that against Mr. Kern's Exhibit No. 33 on page 15, I find that he shows an average distance of 44.4 miles, figured via all routes, tariff routes, regardless of whether those routes carry the going rate of 80 cents or higher rates. Now as I understand it, this 47 miles is from all origin points in the Middle district [fol. 1250] via all tariff routes carrying the going rate of 80 cents.

A. 80 cents, yes. I think this lower average of Mr. Kern's is due to the fact that there are shorter distances for different rates, there between the Middle district and Canton.

It is pointed out that on Mr. Kern's exhibit 33, at page 15, if you take the routes via which the rate of 80 cents applies, the average distance is 44.3 miles, or one-tenth of a mile less than he shows if you compute via all tariff routes, regardless of what rate is carried thereover. (653) I don't know just how the difference will be accounted for, but so far as the rate is concerned the block would be between 40 and 50 miles, so there would be no difference in the rate applying, if you make your computation via all tariff routes. I did not attempt to make the computation via short tariff routes.

From the Massillon district to Canton I show an average distance of 29 miles, which 3.8 miles less than the average distance shown by Mr. Kern on his exhibit 33 for the 80 cent rate as covered. The situation as I understand it is that there is a mine or two right close to the city of Massillon. I can't say definitely as to whether that is all there really is in the group.

By Mr. Bull:

The Butler-Mercer and Freeport districts are not part of what is known as the Crescent group. (654) The definition "Crescent" starts at Pittsburgh, but there is no such [fol. 1251] thing in the tariff as the Inner or Outer Crescent group.

In the term "Fairmont" as I use it on my exhibit, I would say that included Fairmont No. 1 and Fairmont No. 2, what is known as the Opekiska district, the Monongah, Short Line and the Clarksburg districts, and of course I include in that the districts shown in the P. & L. E. and Pennsylvania tariffs as Fairmont. I also include the Western Maryland Fairmont district in that designation.

Referring to my exhibit 106, I do not show the average distance from Ohio No. 8 and Cambridge combined, because they do not take the same rate to Youngstown.

(655) On my exhibit 112, from Pittsburgh I show the average percent of the 23922 scale as 109. I obtained that percentage by adding the four rates together in the column 23922 scale and dividing that total into the sum of four rates shown under the column headed "Present Rates."

Q. I think Mr. Webber asked you if the distances shown on your exhibit in some of these comparisons with the scale were figured in the same manner as the distances were figured in that decision in Docket 23922 and you answered him, I believe, that the percentages would be higher. Did you actually figure the distances as was done in 23922, or was that just based on your judgment?

A. I answered him knowing that the distances would be reduced from each of the districts without having figured [fol. 1252] them, and I don't believe it would be possible to figure them in that manner.

By Mr. Keeler:

Q. Are you certain that you are correct in your answer to Mr. Bull, that in figuring your distances from the Fairmont district you have included only the rate districts to which you refer and have not included the distance from the other origin districts as shown in the tariffs that take the Fairmont rates?

(656) A. We have taken and included in the Fairmont district all of the district that is embraced in the Fairmont

rate group. Now I think that also includes the Morgantown mines as well.

It is pointed out that there are other rate districts in the tariff immediately south of the Clarksburg district which take the Fairmont district rates. In computing my distances I have not included those stations, such as Belington.

In determining my points of origin in the Fairmont district, I have included all of the stations and all of the mines set forth in the tariffs of the P. & L. E., P. R. R., and B. & O. It is suggested that the tariffs in some instances show mines, but that my distance tariff does not show the distances from those mines. Where that is done we have used the very next station that the distances are indicated, that is the nearest station to that mine. It might be beyond or it might be just next door to it.

[fol. 1253] By Mr. McVann:

(657) On my exhibit 106, I show the average distances from the McRoberts, Hazard, Harlan and South Jellico districts. Those districts are located in eastern Kentucky and Tennessee, and are served by the L. & N. and the Southern.

There is considerable movement of coal from those districts to this northeastern Ohio territory, although I have not shown that anywhere in my exhibits.

Clinch Valley No. 1 and No. 2 and Stonega are located just south of the Pocahontas district, and Oakdale is further south and west, and almost directly below the South Jellico district. All these districts are Outer Crescent designations. There is some movement of coal from those districts to the northeastern Ohio territory; not quite as large as from the other districts mentioned.

(658) The tonnage moving from all the southern districts for the year 1930 was about 2,500,000 tons. The Hazard district shipped 245,000 tons into northeastern Ohio territory. Harlan shipped 227,000 tons, but I have not separated that as to northeastern Ohio, that is between northeastern Ohio and the balance of Ohio. Clinch Valley No. 1 and No. 2 shipped 50,000 tons in 1930 to northeastern Ohio. I do not have Stonega or Oakdale separated. They shipped considerably less than that.

I have read through the complaint of the Property Owners Committee, and I understand that none of the districts

we have been discussing are included as complainants in that petition (660).

[fol. 1254] By Mr. Ballard:

Whether, in applying the short tariff route formula to the Pittsburgh distance, it would throw you into a different block of the 23922 scale, depends entirely on how you figure your short line tariff route. I did not figure it because it would be a pretty hard task to do that from the Pittsburgh district. There is a great number of routes to check, and there are different lines serving the same origin fields. The coal may be located on the line of the longest distance, while it is also located in the tariff via the short route, which does not produce the volume of the coal.

(661) Q. If you have a given point of origin there could be no difference of opinion could there, as to what the short tariff route is from that point of origin to a given destination?

A. I don't think there would if you picked out a specific origin and destination, no.

Q. Then is it not true that the difficulty you have in mind is not in identifying the short tariff routes, but in selecting the points from which to figure?

A. Well, I did not have that in mind, particularly, because from all of the routes and all of the mines of the Pittsburgh district, to try to figure the distances via that way would be an insurmountable task as we would view it.

My formula from the Pittsburgh district falls into the block 180 and over 160. I am speaking of Cleveland now—175 miles.

[fol. 1255] (662) I did not consider what the effect of our No. 8 mileage would be if we had used the same formula as was used in 23922, namely the short tariff route. We did not do that any different than Pittsburgh. Nor did we as to Cambridge, or as to No. 8 and Cambridge together. We did not consider the effect on any of our distances of rejecting tariff routes that are unduly circuitous. We used all tariff routes in every instance, in every comparison—even though in some particular case for some special reason the logical routes might be closed under the tariff and the only open tariff route might be 50 per cent longer. If that is not the tariff route, we did not use it at all.

(663) In connection with the Baltimore & Ohio and the Pennsylvania Railroad, we used every origin point and every mine. If the origin point and the mine were similar, we did not make any additional computation for that reason. We used mines or origins, and no duplication of where the mine was shown as an origin in the other part of the tariff.

Q. So that in the Pennsylvania list, for example, where there are six mines, at a particular station, and that station appears once in the station list and the six mines appear as six mines in the mine list, you treated that as one item?

A. No, sir, we treated every individual mine in every district.

[fol. 1256]. If we found a station in the station list and a mine in the mine list and they were in fact the same geographical point, we used the mine only. It was only one element in the average, one unit. If instead of one mine at that point there were two, that is the station and two mines and the three things were in fact the same geographical point, we used the two mines. I don't know whether Mr. Kern in his formula used that particular scheme or not.

(664) When I was asked why I did not average No. 8 and Cambridge to Youngstown, I said it was because the rates were different. I did not average them to Cleveland, where the rates are the same, and only on this 106, were they averaged to these points, where the rates are common to both.

I answered Mr. Bronson that, having in mind what was testified to previous to my testimony, if the No. 8 and Cambridge is to be one rate then certainly the distances from both should be combined. In making any rate, whether you are testing one or trying to secure a rate, if you are going to ask for two groups to be thrown together it is certain they should be averaged, so far as distance is concerned.

(665) As to whether that same test ought not be applied to the southern districts, if they are going to make any showing as to what the rates are from an individual district in the whole group, that same answer would apply there.

It is pointed out that in one of my exhibits, where I applied the extended scale to the southern district, I show [fol. 1257] separate rates for each of the southern districts which now take the same rates. I did not intend to imply by that that the rate should be treated individually and the rate blanket broken. I just showed them to show what the rates from those districts would be under that scale in the same manner that we did from Pittsburgh.

Q. That means, does it not, that Mr. McVann's district can not be considered properly separately from these eastern Kentucky districts, so far as distance is concerned?

A. That is assuming a lot for Mr. McVann, but as I stated, if you are going to compare the rate you must compare it with the average of all of the mines in that particular rate zone. Whatever the tariff district may be that carries the local vein, it is a rate blanket and should be used. It follows that, if you are either testing that rate or making a new one, you must take the average distance from the rate blanket; and that is true as to the destination blanket also.

I am reminded that on my direct I stated that the members of our association (666) had three ways in which to meet the situation created by the Ohio reductions; first, to ship into the market by reducing prices; second, to ship river and rail, and third, to go out of the market. That statement was based on actual conditions and happenings. I don't know the individual tonnages nor the individual concerns who are moving by rail or river. I know of ton- [fol. 1258] nage that has gone to river and rail from what information I gather, but as to specific instances I am not in position to say. I do not know the proportion of the tonnage represented by that. I know that tonnage has moved river and rail from our district in competition with the present Ohio rates.

(667) In my locomotive performance exhibits, taken from the Lake Cargo case, I did not put in any for the Wheeling & Lake Erie because I don't recall finding any W. & L. E. figures in there. I think my exhibit shows the dates of the studies that were offered in that case. On the carriers, it was the third Thursday of April, May, June, July and August, 1930.

In my study of the 23922 scale, I did not compare it with the 23130 scale, but I know what the differences are, if any.

(668) The first 130 miles of the 23922 scale is the 23130 scale. I have before me what the commission did when it progressed the 130 miles up to 300. I think I stated we progressed the 23922 scale on the basis used by the commission in the last block of its distances, namely from 275 to 300 miles, which was 8 cents for the 25 miles. Compared to that, the commission had used 10, 9 and 8, but for different sized blocks.

(669) Q. My question is whether you tried to discover any rational basis for the method of progression which the commission used up to 300 miles, so that you could use [fol. 1259] that in continuing it beyond 300?

A. No, I did not go any further than as stated, but I just used there the 8 cents for each 25 mile block.

We have estimated that the amount of steam and domestic coal which our districts are marketing in northeastern Ohio at two and a half to three million tons. That was the estimate we made after comparing what we actually knew was steam and domestic. I have in mind the three districts involved in our complaint. The figures given by me Saturday, the total shipment figures of 16,000,000 for 1930 and 12,000,000 for 1931, include the shipments of our members from the Bureau only, and to all destinations by rail. Those figures are the total shipments of our members only, by rail. My estimate of two and a half to three million steam and domestic into northeastern Ohio is for the three districts (670) as a whole, whether they are our members or not. I have never figured out what proportion of the tonnage of the three districts our membership comprises. I haven't the least idea. It is not 100 per cent.

By Mr. Bull:

On my exhibit 107, page 2, I show the distances separately to Lorain for Ohio No. 8 and Cambridge, but not the combined distance. The average from the two groups combined to Lorain is 156 miles. To Painesville, which appears on page 3 of exhibit 107, it is 177 miles.

By Mr. Bronson:

Referring to my exhibit 106, it is true that there is considerable movement of coal to the Cleveland territory from

[fol. 1260] the Big Sandy and Eastern Kentucky districts on the Chesapeake & Ohio.

By Mr. Orcutt:

(671) We were parties to both I&S 3801 and I&S 3833. We were an active advocate of the so-called Bronson tariff in I&S 3801, and we supported the Pittsburgh & West Virginia in both suspension cases.

Referring to my exhibit 116, I am asked to explain how I arrived at the figures shown at the bottom of the page, 109 miles for the distance and $1.20 for the rate. We took all of the mines in all of those districts to those individual destinations. We took all of the miles involved in all of the routes, via all tariffs, and made a division which showed 109. That would not be correct as to averages of those figures straight.

(672) We took all mines named in all of the tariffs naming those rates, on that particular exhibit. For instance, from No. 8 to Akron we took every mine listed in all the tariffs taking the $1.28 rate. We did not arrive at the $1.20 the same way, taking the rate from each mine and averaging it, because that would not be necessary there, because these are actual rates and there is just a simple division there. The $1.20 rate is the actual average of the column number which is above it.

The words "average distance" instead of "distance" might be misconstrued in that sense, but those distances are as stated at the top. It does not state there, but those are the averages via all tariff routes over which those rates [fol. 1261] apply, whether circuitous or not.

(673) We have not made any statement as to what we are suggesting on the subject of a mileage scale of rates for application from the Pittsburgh district to destinations in Ohio involved here. We might favor a mileage scale for the base district, meaning Ohio No. 8 or Pittsburgh. It would not make any difference from our standpoint which. Under my previous answer, in the Ohio No. 8 calculation we would have to include Ohio No. 8 and Cambridge as a combined group.

After we had that base district rate, we would relate Connellsville to Pittsburgh the same as it now is—a differential over. We have not attacked any differentials as between any of the origin districts, except in so far as we

attack the relationship as existing between Western Pennsylvania and Ohio. (674) We would treat Fairmont the same way, and Freeport would make the same as Pittsburgh. We have not in any way brought southern West Virginia in and I don't know whether I would care to say what should be done with those fellows.

(675) Assuming they took Ohio No. 8 group for the rate base on a mileage scale, we would relate Pittsburgh to Ohio No. 8, not to exceed 10 cents over Ohio No. 8 in any event.

I am asked if I do not know that the difference between the longest and the shortest distance from any mine in the Pittsburgh group to Cleveland is in excess of 100 miles. I don't know, I haven't checked that particularly.

[fol. 1262] "Q. Well, I understand, but you know enough about the Pittsburgh group do you not, to know whether the difference would be approximately 100 miles or over?

A. You are speaking as to the shortest tariff and the longest tariff?

Q. The nearest mine and the farthest mine?

A. Now that takes up a different question. The nearest mine and the farthest mine is not in 100 miles, no, sir."

[fol. 1263] I haven't figured them out, but I would say possibly from the nearest mine to the most distant mine, as to actual distance between the two might be about 70 miles, but as to the tariff route I think it will run about 104, 105 or 110 miles.

(676) Q. What justification or precedent do you have for the suggestion that a mileage scale be used to establish the rate from one origin group to the destinations involved, and then the throwing away of that mileage scale and fixing all other origin groups differentially?

A. I have in mind a mileage scale to be used as a yardstick. I don't care whether you use it, but whether or not you arrive at some yardstick, and generally speaking you would have to take a mileage scale to arrive at the yardstick. As I said before in this case, we are attacking only our relationship as between Western Pennsylvania and Ohio districts. Whether or not the existing differentials are right or wrong, we have not brought that in issue.

By Mr. Weber:

It is asserted that there is apparently no reference to the Kentucky districts throughout exhibits 107, 108, 109

and the following exhibits. The only reason for that is that northeastern Kentucky is a very minor factor in anything. I have used northeastern Kentucky in exhibit 106 (677), but I have not used them in any of the others because of the two districts. Big Sandy is the district involved from the standpoint of the tonnage of those two grouped together.

[fol. 1264] It is suggested that with respect to Exhibit No. 116, I have not yet made it clear what part of the districts the several rates apply from. Where we have used Crooksville to any particular point and shown a distance and a rate, that is the distance via which that rate applies, and there are, as I said before, destinations to which there are two or more rates from an individual origin group, and where these rates apply we have used the distances for those particular rates only.

[fol. 1265] As to exhibit 117, I think as to what part of the Fairmont district the $1.52 rate applies is explained on exhibit 122, in which if is indicated that that is the Cheat Haven & Bruceton Branch of the the B. & O. Railroad, and we have put it in the Fairmont district because the Fairmont district and points other than short haul will include that branch. In other words, the $1.52 rate shown there and the distances do not represent either the rate or distance from the Fairmont district; only from those mines, that is all.

(678) I am asked to explain, in connection with exhibit 118, what I mean by the rates from the Crooksville district as they are shown to Akron and Lorain. From Crooksville to Akron, that 176 miles is the distance via which the $1.60 rate applies. From Crooksville to Lorain the 187 shown is the distance for which the $1.47 rate applies. That is over the routes east of affected territory, and there are some points where they were just 2 cents over Ohio No. 8, and since the change was made to maintain the relationship it was automatically then published 2 cents over Ohio No. 8.

On Exhibit No. 119 I show distances and rates, Massillon to Detroit and Fort Wayne. There is practically no movement of coal between that Massillon district and those points.

By Mr. Day:

I do not think that, in the event the commission should adopt the plan of fixing rates from the base group on a [fol. 1266] mileage basis to the northeastern Ohio destinations involved here, that the same plan might be followed throughout C. F. A. territory. (679) I have not given it sufficient thought to see what they should do with the thing. This Indiana scale was not made to cover a large or a distance destination territory. It is primarily a short haul scale, although it runs up to 300 miles.

I am asked if I know the reason for the promulgation of the 23922 scale. Having in mind what the commission were thinking, I would not have any knowledge of what their reasons were. I think it is correct that the case was submitted prior to the decision of the Illinois 13th Section case, Docket 23130.

Q. Do you know that the Indiana carriers requested the commission in Docket 23922 to establish from Indiana into Illinois a comparable basis of rates to that which the commission would fix in Docket 23130 within Illinois?

A. I don't know what their testimony was, no sir.

The 23130 scale is originally prescribed for distances up to 130 miles other than those they specifically prescribed in that decision. That scale, so called, was to apply in the territory (680) in Illinois around Peoria and Galesburg. I don't offhand recall what lines publish particular rates between those points. I think the Burlington was the principal carrier and I think the Burlington has also asked for a reduction in that level, since the commission's decision [fol. 1267] in Docket 23130. Some of the other Illinois lines have made similar requests on the commission. As I view it, the reason for those requests is due to truck competition on short hauls.

There is no application of the 23130 scale from Springfield over the Peoria, Fulton County group, as an example. Southern Illinois over the Springfield district group; not in that particular case. As to whether the scale has application from the group as a whole, or only from point to point, I don't know without checking that back.

(681) The Illinois rates indicated on my exhibit are specific rates. For instance on exhibit 117 I show Wilmington, Belleville, Peoria, etc., to different destinations.

Those are specific rates in those groups—for instance, the Belleville group to Decatur, the southern Illinois group to Decatur. The others are individual rates from Peoria to Chicago. The latter is an individual point to point rate.

I know, generally, the lines serving those districts. I think Wilmington, Illinois, is a Chicago & Alton point.

[fol. 1268] I don't recall exactly the individual roads which serve the Belleville District, but I know the roads in that territory that serve the Illinois origin and destination groups. I know generally the lines serving Peoria and running to Chicago. Specifically the Burlington and the Northwestern serve both of them. The Rock Island is also a Peoria-Chicago line. I am not so certain about the others. The Belleville District is located just north of the southern Illinois district. It is just south of East St. Louis and a fraction east. (683) I presume these rates will have to apply to destinations intermediate to Chicago, Decatur or Freeport where they would result in any Fourth Sections. The rate of $1.70 from Springfield to Freeport shown on Exhibit No. 119 is the rate that was in effect on the 27th of last month (Nov. 27, 1932). If it is a fact that the Interstate Commerce Commission in Docket No. 23130 would not permit the increase of certain intrastate rates in Illinois under the carriers' Thirteenth Section application until rates from Indiana points to Rockport and Dixon, Illinois had been increased, that would not indicate that these last mentioned rates were low rates.

(684) The rate of $1.60 from Centralia to Chicago applies to intermediate destinations for distances which are shorter but not considerably shorter. There are no rates from Illinois or Indiana into Ohio published for that distance. I am comparing rates there (685) for distances somewhat comparable with the Pittsburgh distance to the destination territory. From Illinois to Ohio you wouldn't find, I don't believe, the rates for those distances. I made no study of rates from Indiana or Illinois into Ohio. With reference to my Exhibit No. 107 I did not say that the Commission had prescribed any rates in relation to the Holmes & Hallowell scale from those districts.

[fol. 1269] (686) I don't recall any case in which the Commission has prescribed rates with relation to the Holmes & Hallowell scale from any of the groups shown on Exhibit 107 to any destination. I did not make any general study

to everywhere in the country. I don't know of any instance where the Commission has fixed rates from the Appalachian fields by using the Holmes & Hallowell scale as a basis, but I don't want that to mean that it has never done so. I mean that the Commission has accepted the Holmes & Hallowell scale as a yardstick in more cases than they have turned it down. I am referring to the territory west of Ohio.

[fol. 1270] By Mr. M. Carter Hall:

(687) As to a single case in what is known as Eastern Trunk Line territory or east of the Appalachian range where the commission has adopted the Holmes and Hallowell scale as a measure or yardstick of rates, not knowing what the commission had in mind in their decisions, I don't know. I know they have prescribed rates that are a certain percentage of that scale.

I think there are just as many cases in which the Commission used the Holmes & Hallowell scale as a yardstick as there are cases in which the Commission rejected it.

(688) I think I answered Mr. Orcutt as to what the star meant in Exhibit 100, when I said that should have been referenced there I. C. C. Statement of Operating Revenues, 31200. In my direct testimony, I stated why I confined those individual figures to the three lines named.

(Counsel repeats objection previously noted to Exhibit 101.)

(689) Page 1 of Exhibit No. 101 is based on Exhibit 258. In offering this exhibit containing both the carrier figures and Ackerman figures, I did not state the purpose for which I offered it on Saturday. We are showing there not only the average pounds of tractive effort per gross ton miles, we are showing also the theory which the carriers themselves stated was a more correct theory, and that is gross ton miles per 1000 tractive pound hours, and that is given to the commission for what benefit they may deem that either one would be used. That is referred to on page 1 [fol. 1271] of the exhibit. I offer it as a benefit to the commission in determining either similarity of conditions or differences.

(690) Referring to sheets 2, 3 and 4 of that exhibit, these are based on Mr. Ackerman's exhibits and incorporate also

the carriers' theory; we have given them both for the benefit of the commission to determine which they think the better of the two. We depend on the Ackerman figures to show what the tractive effort expenditure is as between the origins and destinations shown. I don't go to any extent of adopting anything that Mr. Ackerman had. I don't recall all of the statements he put in with this. I made a study of his exhibits. I know why he put them in, or I have an idea. I did not study his testimony to find out the details and the theory upon which he put them in before I attempted to put them in this case. (691) As to what Mr. Ackerman intended to show by those figures, I think that is for the attorney to explain, not myself. I wasn't there in that particular case where he presented it. I am willing to stand cross examination on any figure or exhibit I have put in. These figures on sheets 2, 3, and 4, are adopted by me.

The figures on sheet 4 of this exhibit, column 6, represent the tractive pound effort required to move one gross ton one mile to Cleveland and Lorain, as indicated there, from each of those origin districts via those routes to those destinations, and as far as I know, they are absolutely correct. [fol. 1272] On the face of those figures, from Ohio No. 8, it requires 16.27 pounds, and from Cambridge 18.42 pounds, as compared with 14.03 pounds from Pittsburgh. (692) It is correct that would indicate that conditions as reflected by these figures are more difficult in Ohio No. 8 and Cambridge to Cleveland and Lorain than they are from Pittsburgh to Cleveland and Lorain. I think that those figures would indicate that, considering the tractive effort expenditures, it requires less to haul from Pittsburgh to these destinations than it does from Ohio No. 8 and Cambridge. I have not made any statement to the effect that taking these figures alone and relying on them for what they are worth, they indicate a sufficient difference between the ultimate figures that would justify in my judgment, higher rates from Ohio No. 8 and Cambridge to these destinations than from Pittsburgh to these same destinations. I do not consider the difference between them sufficient to justify higher rates from Ohio districts than from the Pittsburgh District, because the distance from Ohio is shorter than from Pittsburgh. (693) These figures would certainly indicate that Pittsburgh should not have a higher level of rates than from Ohio No. 8 and Cambridge.

If Mr. Ackerman's Exhibit No. 428, introduced in Docket 23430, Central Bituminous Coal Operators Association, shows, using the same theory of tractive effort, that the average tractive power required to haul one gross ton from all Illinois districts to Chicago was only 13, following out [fol. 1273] that same theory, that might bring you to the same conclusion, that Illinois could properly take a lower rate level than either Ohio or Pittsburgh. (694)

I wouldn't say right offhand whether the route of the Burlington from Southern Illinois goes through the Peoria rate group on its way to Chicago. The Illinois Central from Southern Illinois to Chicago passes through some of the Peoria group. I don't know about the Big Four. I think the Missouri Pacific and the Chicago & Alton will pass through part of the Peoria group on the way to Chicago from Southern Illinois.

With reference to my statement that I did not recall any exhibits with respect to the Wheeling & Lake Erie introduced by Mr. Ackerman in the Lake Cargo Cases, Dockets 23240 and 23241, I certainly overlooked his Exhibit No. 137 showing the route of the Wheeling & Lake Erie from Kingwood as an assembling point to Huron, because I did not know they were in there. These exhibits that I have put in here I have taken and studied them, as I indicated in my direct testimony, and how I separated the differences in the two groups. (695) I did not intentionally overlook the Wheeling & Lake Erie.

Referring to my Exhibit No. 107, purporting to be the rates from all the districts and what the average would be under the 23922 scale, I think I answered Mr. Webber why I omitted Northeastern Kentucky, because it is a very insignificant group from those two. Oakdale is also a very insignificant group and is not included in my Exhibit No. [fol. 1274] 107. I put it in No. 106 but I omitted it in No. 107. I said in my direct testimony that the rates in Exhibit No. 107 were from all of the districts indicated at the left-hand side of the page.

Coming to Exhibit No. 108 where I use a different setup to show distances via all tariff routes, and what the rates would be under Docket 23922, on this exhibit I omitted Northeastern Kentucky, Clinch Valley No. 1 and No. 2, Stonega and Oakdale; all of them are very small (696) factors in tonnage into this territory. I didn't say I didn't

think they really ought not be given any consideration in this case. They are not involved in the case and I put them in here to show, just as the exhibit indicates, what the distances are and what the rates are and what they would be under those scales and the amount they are less than those scales. I could have picked Indiana and Illinois also.

In my Exhibit No. 114, I stated that in extending the scale of the commission I progressed it eight cents for each 25 mile block over 300 miles. It is not correct that by extending this scale the uniform rate of progression based on the highest mileage block of the scale the effect is, in comparing rates for short distances versus long distances you will get a higher percentage for the short distances and an abnormally low percentage for the long distances (697), because your ten mile blocks prior to that are for 5 cents for [fol. 1275] each 10 miles; for each 20 miles it is 10 cents and your percentage there would still mount up, while your 25 mile block is but 8 cents for every 25 instead of 15 on the lower blocks. My method of progression is not contrary to that adopted by the commission in many cases. If you look at the Holmes & Hallowell scale you will find the same. As to that scale having been criticised by the commission in that respect in the Standard Fuel & Supply Case and the Bedford case—I did not know that they condemned any of their scales.

As to why, on my Exhibit No. 116, I compare rates from the Pittsburgh district to Youngstown, Ohio, with the rates for similar or greater hauls from other districts to Ohio destinations only, whereas in the following exhibits, 117, 118, 119 and 120 I inject on all of these exhibits at one place or another some few rates to Illinois destinations as well as Ohio destinations—that is very easily answered, because we don't have any short haul distances into Ohio comparable with the 99 miles from Illinois. (698)

I think, as I stated in my direct testimony, these are comparisons for hauls of approximately the same or greater distances where the rates were lower, and in the instance of Exhibit 116 we have gone to the point of showing it from our competitive Ohio districts to the same Ohio destinations that Pittsburgh ships to. I did not say that I have selected [fol. 1276] Illinois and other points because of the absence of short haul distances with which to compare it to points

in Ohio. I said there were no hauls I found for the same distances comparable with their Youngstown. I suppose I could have found them if I had checked all over Illinois or any other state. Youngstown is relatively a short haul. I did not have Youngstown in mind when I picked rates, for example from Linton and Sullivan to Chicago, 200 miles, shown on Exhibit 118; that had nothing to do with it. As to why I include (699) destinations other than Ohio destinations in Exhibits No. 117 to 120 inclusive, if you will read the direct testimony you will find the answer to all these questions. With the heading at the top showing various Ohio (700) destinations, but also including various Illinois destinations and Ohio and Michigan, all that would be necessary would be to add the words, "and from other districts to various destinations." It is merely for the purpose of comparing rates and distances.

By Mr. Orcutt:

As to why I left out the Connellsville and Fairmont Districts in my Exhibits 108 to 111, inclusive, as I said before, we have not any complaint as to the differentials between those districts, so that the Pittsburgh and Freeport being considered base, they would automatically preserve their differentials that they now have. Under the theory that we have not asked for any disturbances of the relationships, the matter of the distance and the hauls from the Connells- [fol. 1277] ville group or the Fairmont District, we have not considered it necessary to put in.

By Mr. Bronson:

(701) Q. Since you have used this scale in Docket 23922 and since the commission in I. & S. 774 stated they found the Hocking to Toledo rate for a haul of 220 miles was the key rate of the entire C. F. A. adjustment from Ohio and the Crescents to points west of the Sandusky-Galion line, the affected territory, did you notice what rate would be provided for a 220 mile haul to see whether that scale, if applied elsewhere, would affect the integrity of other rates from the Crescents and Ohio?

A. It would make a change in the rates as between all of Ohio and the Hocking District.

From Hocking to Toledo, the rate under that scale would be $1.75, and from the Ohio No. 8 would be $1.85, using the

miles from each individual group separately. On the basis of 220 miles, according to the decision of the commission, it would make the Hocking rate $1.85 against an actual rate of $1.89.

By Mr. Martin:

(702) The distance of 156 miles shown on Exhibit 102 is the average distance, I think I mentioned in my direct, from the Wheeling & Lake Erie direct as well as the Wheeling-Erie routes combined. I thought I had those figures with [fol. 1278] me. I don't have them. If you want them I can furnish them.

Referring to Exhibit No. 103 and in certain succeeding exhibits where I have compared the existing rates from certain of these coal origin districts with the rates which would be made by the application of the Holmes & Hallowell scale and the Docket 23922 scale to these same distances, in no case have I figured my distances from these coal origin districts either according to the distance formula in the Holmes & Hallowell decision or in the 13922 case. All of my mileages are via all tariff routes. The rule in the Holmes & Hallowell decision for the application of that scale is to figure the distance via the shortest possible multiple three-line route, regardless of tariff; and in the 13922 decision, the shortest route from individual origin to destination, or if a group is to be maintained it will be the average of the shortest tariff route from all mines in that district.

[fol. 1279] (704) I have read the recent decision of the Interstate Commerce Commission involving rates from the Inner Crescent to Greenville, Ohio. I have not studied it very thoroughly, though. As to the commission reducing the previous rate of $2.59 to Greenville to a somewhat lower basis, I don't recall the figure, but as my memory serves me (705), there was a reduction in the rate to Greenville.

By Mr. Tefft:

It is correct that the operators of the mines in Western Pennsylvania are interested in the movement to northwestern Ohio and the Toledo group, but we are sorry to say there is no movement. If we confined the 23922 scale

to northeastern Ohio and then held our present basis of rates to northwestern Ohio, there would be quite a spread between the two rates, as between Cleveland or Lorain and Toledo and other points in the territory., As to the Russellton situation then being even more unsatisfactory to Western Pennsylvania, it certainly would not be a satisfactory basis of rates.

By Examiner Trezise:

(707) Regarding the term "mileage scale" I think possibly I have answered in one of the questions raised as to the application of the mileage scale. We use the mileage scale of the Illinois-Indiana Case, Docket 23922. That scale was apparently made for short hauls, and undoubtedly a base district rate having been made with respect to [fol. 1280] Brazil-Clinton into the nearby Indiana and Illinois territory, and that might properly be a measuring stick for what the base rate would be from either Ohio No. 8 as the base or from Pittsburgh as the base, without advocating that scale extended and under the theory that it might remove everything. We do not advocate the extension of that scale as a mileage scale from all origin districts.

I appreciate it may be the fact that the mileage scale in a case of this kind might be an entirely different kind of scale than one that might be formulated for different reasons than we have here. (708)

Redirect examination.

By Mr. Gutheim:

This adjustment of rates from these various districts into northeastern Ohio is an adjustment of groups of rates, grouped into origin districts. It necessarily follows that with respect to every one of the origin districts you are bound to have a short haul mine, and also bound to have a long haul mine, and mines of various distances in between. Since I have been connected with the Western Pennsylvania Coal Traffic Bureau cases have arisen in which short haul mines have sought to be taken out of the district and given a lower rate (709); and I am acquainted with other cases where long haul mines have found that the mines next beyond in a higher rated district were trying to break into

the lower rated district. In these cases these carriers have customarily defended the boundaries of the districts. [fol. 1281] With respect to Exhibit No. 106, the average of the distances from the three southern high volatile districts represented by the Property Owners Committee to these destinations would be as follows: taking Kenova, Thacker and Kanawha to Akron, Ohio, the average distance is 392 miles; to Canton, 376 miles; to Cleveland, 414 miles; to Youngstown, 450 miles; to the destinations shown in the last column, 417 miles. The like averages from the three low volatile districts represented here by the Property Owners Committee—New River, Pocahontas and Tug River, would be the following: to Akron they average 470; Canton 458; Cleveland 494; Youngstown 524; and to the destinations in the last column 490. With respect to other southern high volatile districts, other than northeastern Kentucky, none of them are as short distance as the Kanawha, Kenova and Thacker mines. They are all longer haul mines with the exception of northeastern Kentucky than the average of Kanawha, Kenova and Thacker, but they all get the Kanawha-Kenova-Thacker rate. The Clinch Valley, Stonega and Oakdale mines are greater than New River, Pocahontas and Tug River distances to the same territory, but they get the New River-Pocahontas-Tug River rate.

By Mr. McVann:

I would say that the average distances I have (711) given are all computed in the same manner as the mileages from other districts which I have described. In other words, I have taken all of the mines in those three districts, all of the mileages in the tariff routes, made the division, and that is the figure of those computations.

[fol. 1282] By Mr. Gutheim:

So far as the interests of these southern districts go, it is a fact that Stonega is at this moment before the commission seeking a reduction in its rates to the Harlan basis into this territory. There is no river tonnage that I know of that is moving except from river mines. The river mines in the Freeport, Connellsville and Pittsburgh districts are a very small fraction of the total number of rail

mines. There are none whatever in Freeport; only a very few in Pittsburgh, and most in Connellsville. That is, mines having river tipples.

In all of these computations of Witness Ackerman (712) which I have used, the results are measured in the cost of locomotive tractive effort in handling one gross ton per mile. In any consideration that may be given to these Ackerman figures, you would also have to take into consideration the total miles of haul.

With respect to Illinois, the Burlington is by far the longest and is a much longer route than the short route from Southern Illinois to Chicago.

In the application of the Holmes & Hallowell scale of rates, after I determined the rate by calculating the mileage in the manner described, the rate was then applied via all routes. That results in a longer actual haul of the coal on the Holmes & Hallowell scale than is indicated by the mileage that actually determines the level of the rate. I think [fol. 1283] the situation in that respect so far as the 13922 scale is concerned is somewhat the same as the Holmes & Hallowell scale.

By Mr. Herrold:

(714) I stated that we figured the average distances over all tariff routes.

In answering the question as to whether if there should be a mine, say on the B. & O. at a certain station and the B. & O. could reach a common destination from that mine at a distance of 50 miles, and from that same station there was a mine on the Pennsylvania Railroad, and over the Pennsylvania direct, that being the only line over which the rate would apply, the distance was 100 miles, or double the distance over the B. & O.,—I would say I would use the 50 mile distance for the B. & O. and then use the 100 miles for the Pennsylvania, but that would not necessarily infer that there would be 50 miles difference in the average. There would be very few such cases. It would depend on the number of mines. If the mine in that case was located on the Pennsylvania and one mine on the B. & O. at the same point, I would use the Pennsylvania mileage. I would use the 100 miles; use all of them. If the mine is not on the B. & O. it could not be a tariff route. I use 100 miles

because the mine was on the Pennsylvania and not on the B. & O.

[fol. 1284] By Mr. Gutheim:

(715) In the use of the Ackerman figures of average tractive efforts per gross ton mile, and in addition to giving consideration to the total miles of haul, it would be necessary also in determining rates to take into consideration any other transportation conditions that might not be reflected by the Ackerman figures.

Recross-examination.

By Mr. Day:

I did not say that mileages under the 13922 scale would be computed substantially as they are in the Holmes & Hallowell scale. I stated in answer to Mr. Martin's question what I considered were the rules for figuring distances in both the Indiana and the Ohio scales. If, under the 13922 decision, the line had a circuitous route between two points, but that was the only (716) route that was covered by the tariff, then the mileage scale would apply on the basis of that circuitous route distance.

On Exhibits 117 and 120 I did not say that the distances there shown represented the average from all points in the group by the shortest working route; there is not a shortest working route in any of my exhibits. Every figure I have used is all tariff routes, every single instance, except that one instance to Chicago which was the average in there for that rate.

By Mr. Bronson:

In Illinois most of the tonnage moves by a very circuitous [fol. 1285] route. One example of the circuitous route in Illinois would be from the Indiana mines on the Illinois Central to points in Illinois, and from Southern Illinois via the Burlington, which handles most of the tonnage.

By Mr. Gutheim:

(717) I stated under the 23922 scale, if the mileage happened to be circuitous from a certain point I would use the mileage if that was the only tariff route. There isn't

any shorter route. The order, as I understand it, requires the shortest tariff distance from the mine, and if there is only one route from that individual mine that may be 200 miles, the fact that the mine next to it, a mile away, may be 75, doesn't change the fact that you would have to figure that other route.

My answer is still correct even though distances from point of origin are to be computed over the shortest existing tariff routes over which joint or single line rates apply except that so long as present origin groups are maintained without material charge, the rate from each group shall be based on the average of the distances from the further existing tariff route over which joint or single line rates apply from all the mining points in the group.

[fol. 1286] ELMER STRIEBEL was called as a witness, and having been duly sworn, testified as follows:

Direct examination:

By Mr. Gutheim:

(719) My name is Elmer Striebel, I live in Cleveland, Ohio. Since 1927 I have been employed in that city as Manager of The Pittsburgh Coal Company's Sales Office, selling only the (720) product of that company. Previously, for something like fifteen years, I had also been engaged in buying, floating and selling coal in the Upper Lake Dock territory.

The Cleveland office of the Pittsburgh Coal Company handles the sales of our company in all of northeastern Ohio, as that territory has been described here, except the sales in around Youngstown. My work in this connection requires me to have a knowledge of the competitive condition under which coal is sold in this market, and this also includes a working knowledge of the currently effective freight rates. I am generally informed concerning the freight rates on Pittsburgh coal throughout the territory. I am similarly informed concerning recent reductions in the rates on competing Ohio coals, as well as some of the competing Pittsburgh coals, beginning about August 1st of this year. I not only know what these rate changes

have been, but I know to my sorrow of the adverse effect of these rate changes on our sales. The whole thing is a matter of the utmost importance and seriousness to me, [fol. 1287] personally, to my local Cleveland office, and to my company.

(721) In addition to my knowledge of the competitive situation in northeastern Ohio, I have made a study of the effect of the reduced freight rates on our trade which we have customarily sold through the Cleveland office up to August 1st of this year. By way of summarizing what the effect of these rate changes has been and will be upon the business of my office, I can discuss the situation with respect to certain classifications of the trade.

There is first what I might call the Class "A" group of trade. This includes accounts with whom we customarily have had contract on a yearly basis and with whom we had such contract covering the present coal year when the freight reductions were made from Ohio mines, beginning August 1st last. These group "A" customers quit taking coal from us regardless of their contract obligations, almost immediately the rates were reduced from our competitive mines and began to buy competing coal which thereafter could reach their destinations on reduced freight rates. The tonnage lost by us, based upon abrogated contracts this year, is approximately 14,300 tons, divided among ten regular customers. This 14,300 tons is the tonnage we would normally supply and (722) sell these particular ten [fol. 1288] contract customers at the rate they had been taking coal up to August 1st if they had continued throughout the coal year on the contract. I did not mean to say or indicate in this tabulation that all of our contract customers violate their contracts, nor is this 14,300 tons, which is not really much, intended to be made as a point of lost tonnage particularly. The intent is largely to show the tendency on the part of buyers to leave the high rate source of supply for the low rate, even to the extent of violating their contracts. But it is correct that of this class of customers, ten of them have quit us and their business is worth to us about 14,300 tons a year.

There is a second group that I will designate as Class "B" customers, who in prior years had customarily purchased coal from us on contract for their entire year's requirements, but who, on or about April 1st, 1932, elected

to make no new contracts with us, but continued to buy from us on a spot market basis. I might add in this connection that along about April 1, 1932 the situation with respect to coal rates was being agitated a great deal in Ohio. Cases involving rates were before the Ohio Public Utilities Commission, and there was a general feeling noticeable among our customers that they (723) thought rate changes were possible, and that it would be good business to delay contracting and await developments.

[fol. 1289] Our experience was that this group "B" class of customers largely left us immediately after our Ohio and other competitors began to get the 29 cent per ton reduction. These customers then started to buy Ohio coal, and some of them since that time have been buying coal of the Pittsburgh & West Virginia Railroad as well. My records show that of this group we have lost fifteen customers whose annual requirements were worth to us, on the basis of their purchases in the present coal year, approximately 646,900 tons.

As an indication and example of the type of customer referred to in this classification, I have one particular one in mind who bought tremendous tonnages from us on contract. This past year, with some fore-knowledge of what was coming, since the buyer was watching the rate question very closely, they declined to make a contract and immediately quit buying from us as soon as the Ohio rate was reduced, and the only coal we are able to sell them now is to one of their eastern plants not involved in this rate reduction, and that plant unfortunately takes about one-sixth of their total annual requirements.

It is correct that in the case of that one particular customer that we were, prior to August 1st of this year, selling his plants in different territories, that we have lost his business in the territory to which the rate was reduced (724) and we have held it in the territory to which the [fol. 1290] rate was not reduced.

The next class, Class "C", as I divide them, are those who in some cases going back for several years have regularly bought some of their coal from us year in and year out, but rarely on contracts, and who actually were buying coal from us on spot basis up to August 1, 1932. We have lost sixty of such customers, and with them a tonnage of

149,700 tons annually (all of which went to lower rated coal, without exception.

Then there is the Class "D" customers—I will not call them customers, but rather prospects—who in recent years have bought our coal and to whom we have shipped trial coal, extending engineering or combustion service, or in some other manner have definitely and sufficiently interested these buyers in our coal, so that had it not been for adverse rates we would doubtless, by now, be shipping quite a few of them.

I number 39 of these good prospects, and conservatively estimate that their business would run about 123,800 tons as our share, annually. This is all legitimately potential business for us, or at least it was, but is no longer. Now, when we call on this trade, they unhesitatingly tell us that it is no use for us to talk to them about purchasing our coal when they (725) can buy Ohio or Pittsburgh & West Virginia coal on a freight rate of 29 cents per ton less than [fol. 1291] before. Until these rates are adjusted, we must definitely consider this class of business entirely out of our reach. The coal I am talking about with respect to these customers is all coal of the Pittsburgh Coal Company.

All of the coal of which I have been talking is steam and domestic coal and is sold in direct competition with coal for similar purposes from the low rate Ohio and Pittsburgh and West Virginia Districts. There is no gas or by-product coal whatever included in the above figures. These various classes of customers are public utilities, large and small manufacturers, greenhouses, of which there are a great many in our territory, and retail dealers.

Public utilities and occasionally a large manufacturer buy their coal on an efficiency basis; that is to say, on actual fuel value per dollar of delivered cost, but even this kind of customer in these times tends more and more to buy his coal on a price basis only, since economies consequent upon quality coal are minimized when f. o. b. mine prices are at their present low level and by far the greater part of the delivered (726) cost per ton is represented by freight charges.

Ours is a coal of excellent reputation among retail dealers. In the last ten years my company has spent and

is continuing to spend large sums of money to improve the quality and preparation of our coal. In this north-
[fol. 1292] eastern Ohio territory, we have been energetically pushing our Champion coal with the retail dealer trade, particularly. Our coal is mined, sized, washed and prepared generally in the most modern methods, adding greatly to its desirability on the part of the consumer. Just about a year ago at this time we were running half-page advertisements in the Cleveland daily newspapers, advertising our Champion coal, and naming therein as sources of local supply 25 retail dealers in Cleveland who were prepared to serve their trade with our Champion coal. Today, none of these dealers are selling our coal for domestic purposes, since our rate is too high by comparison with competing coal recently benefitting by rate reduction.

All of this trade which I have indicated as lost to us makes no secret of the fact that in leaving us they have gone to competing producers who are in an advantageous position as regards lower rates now as against prior to August 1st last. We have called at their places of business, we have seen their coal and they have shown us records and told us that they are taking Number 8 (727) coal, Middle District and Pittsburgh and West Virginia coal, one or the other, almost entirely, and it is safe to say that if the present freight differential is maintained this condition will not be changed.

[fol. 1293] The territory in which my office sells also includes that territory east of Cleveland which you might call the more northeasterly corner of Ohio, to which there have been no reductions in freight rates. In that territory while our business is, of course, suffering because of the general reduced demand for coal, we are not losing tonnage in the way in which we are in those particular markets where our competitors have got the advantage of us by reason of the recent reductions in freight rates. I consider this all the more significant because some of the customers whom we sell in these destinations to which our freight rates have not been reduced also have plants in the more westerly Ohio territory where the freight rates have been reduced. We have retained the business of those customers in the territory where the freight rates have not been changed and have lost their business in locations where the rates have (728) been changed. In general, we are retaining our steam and

domestic business in the extreme northeastern corner of Ohio and are losing it in other cities of our territory where our competitors have secured the advantage of these rate reductions.

Cross-examination.

By Mr. Bull:

I said we had been losing our business to Pittsburgh and West Virginia districts which had lower rates.

By Mr. Bronson:

When we had a ten cent differential before the reductions [fol. 1294] were made in the Ohio, Pittsburgh and West Virginia rates, it varied somewhat whether we absorbed that ten cents in the case of our steam trade and domestic trade, or were able to obtain ten cents more for that coal than Ohio No. 8 and Cambridge brought in the Cleveland market. In many cases customers are willing to pay another ten cents for the benefit of our superior preparation and better service than some of the coals which did not have that rate. In other cases, in certain times of very strong competition when we did not have a chance to demonstrate some of these advantages of our coal over the lower rate coal and to get in and move coal, we absorb. I would not say that generally the slack market more particularly would have to absorb that rather than the domestic market. I believe it is going to be very difficult in the slack domestic market for Pittsburgh district operators to sell their coal in Cleveland in competition with northern Ohio operators at a differential in excess of ten cents (729); and it is going to be increasingly difficult the higher you get the differential.

The Ohio No. 8 and Cambridge constitute severe competition in our northern Ohio territory, and outside of our own district they are the principal competitors. I would not say the principal competitors are entirely No. 8 and Cambridge coal. Competition from Pittsburgh and West Virginia is rather severe. I mean normally, not talking about today. [fol. 1295] The Pittsburgh & West Virginia competition is not the principal competition, it divides itself with some approach to equality.

As to steam coal, operators on the Pittsburgh and West Virginia, when rates were related by a ten cent differential, and operators on No. 8 (730) and Cambridge Districts irrespective of other Pittsburgh District operators, would comprise our principal competitors in the Cleveland market. That is not entirely as to domestic coal. We don't have a great deal of Hocking steam coal that gets into Cleveland. Domestic coal comes in to some extent. They are competitors of ours. It was because of the southern West Virginia coal, the high volatile and low volatile, is the reason I specified steam when I said competition. Our domestic competition, of course, divides itself. Many people prefer the Pocahontas coal because of the nature of its burning quality, and of course they are not really competition for us because it is a different kind of coal. They get a higher price for it, too. It is correct that the lower volatile coals from West Virginia bring a higher price than the high volatile coal (731). Some people in some localities like southern West Virginia coal and continue to use it—rather some individual dealers and customers have a desire for some of this special hard structure splint of that area and they continue to burn [fol. 1296] it in some tonnages. To some extent all these coals are competitive with our coals from the Pittsburgh District, but where a man desires the West Virginia coal admittedly at the higher price he would buy that.

I wouldn't say it was August 1st that we began losing coal due to the reduction in the rates from Ohio No. 8, Cambridge, Pittsburgh and West Virginia mines, because that is a little too quick, but certainly the middle of August it went right off. August is not a big month and November is, so you can't calculate your loss when there isn't as much sold. It is correct the Pittsburgh and West Virginia did not go into effect until October 5th. (732) Since then I think we have lost more to the northern Ohio mines than to the Pittsburgh and West Virginia mines, because the tonnage combined is probably greater than just the P. & W. V. alone.

By Mr. Ballard:

The tonnages I mentioned in connection with our customers, Classes "A", "B", "C" and "D" are based on 1932 volume. I can't tell you the proportions they represent in this territory of our company's business, because it varies.

Our tonnage varies with the years. I mentioned, leaving out these prospects, about 700,000 tons for the current year. That represents two-thirds of our total tonnage for this year that will be lost if we continue to have these low rates, and I [fol. 1297] might add in that connection that the tonnage we are (733) getting in this year is in some part on contracts which were signed previous to the August 1st rate, and the next time we go around to renew these same contracts we will lose them if we still have this rate against us.

By Mr. Bronson:

We do not have competition from Connellsville in the steam and domestic market, and not a great deal from Fairmont.

By Mr. Ballard:

I don't have any figures here on our approximate steam and domestic business in this territory currently per annum. Our total business has been as high as a million and three-quarter tons. Not all of our domestic coal is sold under the name "Champion". That is the only trade name we have, but some of the dealers have their own names. (734) There are a lot of them. I don't know them all. I don't know as I could give just one or two. I would rather not divulge the fact of some dealers using a special trade name on coal which they do not want to sell as Champion. They might not like to have me tell you what they are putting out as certain coal.

The price of Champion coal would not be representative in all instances of the retail price of our domestic coal. The Champion coal is our domestic coal. The price of Champion coal would be fairly representative of the price of all our [fol. 1298] domestic coal in this territory. (735) To the question whether the price the ultimate consumer pays for Champion coal is representative of the price the consumers pay for our domestic coal in this territory, under whatever name it is sold, there isn't any answer I can give you, because prices vary in different towns in the same territory, depending largely upon the dealers' own interpretation of the cost and the reflection in his sales price. As to the present price of Champion coal, the same answer applies to this question as the previous one. It is awfully hard to give

dealers' prices on a coal where there are no standard prices. One dealer gets one price and another another. We don't sell that coal in Cleveland. My testimony developed that we had lost that in Cleveland. I think last year it was being sold by most dealers in Cleveland at $5.50. (736) That is, 1931. It was bringing at the mine about $1.40—anywhere from $1.25 to $1.40. Again, we don't always have a definite price, don't always have a definite f. o. b. mine price when the dealers' prices remain unchanged. It is being sold at Akron today. They have different prices there. One price is $5.00. The mine price of that coal is from $1.25 to $1.40.

By Mr. McVann:

When I spoke awhile ago about the people who were willing to pay a higher price for the smokeless coals of southern West Virginia than for other coal, I was referring to [fol. 1299] the delivered price. The difference between the rate which would apply on our Pittsburgh coal to Cleveland, and the rate from the southern West Virginia Pocahontas field to Cleveland is considerable—the difference between 2.64 and 1.84—80 cents. (737) That does not take into account the reductions made in the Ohio rates, because we haven't had them at all. I am just testifying for the Pittsburgh Coal Company. We haven't enjoyed any reductions from our mines.

The mine prices of the smokeless coals of southern West Virginia and for our coal vary so much that I would not want to express any opinion as to which is higher. Of course in times of great pressure they will drop their price down very low and then again when they can get a higher price they take advantage of it. The 80 cents per ton freight rate difference would certainly be in there always.

By Mr. Burgess:

There is none of the Pittsburgh Coal Company coal sold in Massillon. Canton was very much of a market for Pittsburgh Company coal. (738) We had some very nice trade in Canton. Since the rate reductions became effective we have lost almost our entire tonnage in the Canton market. I can't give you a figure, but I can say aside from an occasional car of coal to old dealers who handled our coal for fifteen years longer than I have been with the company we

don't sell any coal whatever. That coal was sold for domestic purposes. The rate difference against Pittsburgh at Canton prior to August 1st, in favor of Ohio No. 8 was 33 [fol. 1300] cents.

By Mr. Bronson:

With reference to my statement that there was only 80 cents difference in freight rate to Cleveland as between our Pittsburgh coal and the southern West Virginia Pocahontas field, I did not mean to say that the low volatile coals sell for two or three dollars more there. I think Mr. McVann asked me if that 80 cents would certainly be in there, and that was my answer.

By Mr. McVann:

There is two or three dollars difference between those two coals in retail delivered price.

By Mr. Gutheim:

(739) The 80 cents difference in rates I have been speaking of between Pittsburgh and southern coals had reference to Pittsburgh coal on the one hand and southern low volatile coals on the other. The retailer fixes his own price.

By Mr. Martin:

We shipped just a little bit of coal several months ago on the ex-river rate to Lorain, nothing recently, and that only a small tonnage. That is the only place we can get into. Cleveland, we can't get in that market, it doesn't amount to anything. When I say several months ago I mean just immediately after August 1st. That river coal moved for awhile and stopped.

[fol. 1301] By Mr. Herrold:

(740) We encounter competition to some extent with coals mined in the high volatile district, in the Inner Crescent, such as Kanawha and the eastern Kentucky and Coal River. The differential is 55 cents in Cleveland. Our most severe competition is not encountered with the low volatile coals in southern West Virginia. Our competition is largely with the high volatile coal of Ohio and between Pittsburgh and West Virginia and Pennsylvania.

The Kanawha high volatile coal brings a higher price than ours. In a round figure, I would say, 75 cents higher.

[fol. 1302] J. D. A. MORROW was called as a witness and, having been duly sworn, testified as follows:

Direct examination.

By Mr. Gutheim:

(740) My name is J. D. A. Morrow, President, Pittsburgh Coal Company, and a resident of Pittsburgh, Pennsylvania.

(741) In a general way I have been fairly well acquainted with the coal production conditions of the Pittsburgh district since 1916. In that year I was secretary of the Producers' Association there for about a year, and then I was executive secretary of the National Coal Association, and as Director of Distribution in the Fuel Administration. I was a coal salesman myself. I was vice president in charge of sales of The Pittsburgh Coal Company and as president of the company, and I have intimate acquaintance with the conditions in that field for about fifteen years. That acquaintance has been practically continuous throughout that time.

In a general way, I have in mind the business conditions in the years since 1920 that affected the movement of coal in western Pennsylvania, Ohio, Northern and Southern West Virginia and Eastern Kentucky territory (742). The year 1920 was a year of extremely high coal prices generally. It followed a prolonged strike in 1919, coinciding with an extraordinary foreign demand for coal and rapid resumption of business activity in the United States following the let-down in 1919 at the close of the war. The [fol. 1303] year 1921 was not a good year in the coal business. The general business of the United States fell off again. Coal prices were not so good. In 1922 there was a prolonged strike in the fields north of the Ohio River which were at that time union districts, lasting from the first of April until early fall, and at the same time there were some difficulties with railroad labor, so that there was quite a serious drop in coal production in that year and high prices again which continued into the early part of 1923, with a declining price tonnage carrying throughout the year 1923.

During all these fluctuations of post-war business the coal industry was affected by them, but in 1922 it was addi-

tionally affected by these labor troubles, as it was in 1919 and subsequent to 1920. In 1924 the districts north of the Ohio River signed the Jacksonville wage scale with the United Mine Workers of America, which was the highest wage scale that was paid up to that time in our coal mines. The business of the northern fields, Western Pennsylvania, Ohio, and I might add Illinois and Indiana, too, were all adversely affected by that wage (743) scale because of the mines to the south of the river not being subject to the union and paying lower wages, and they could produce a good quality coal cheaper and could undersell the northern mines.

[fol. 1304] Our own coal company, The Pittsburgh Coal Company, and other companies throughout 1924 and 1925 were suffering a continuous loss of business. The Pittsburgh Coal Company in 1925, at the close of the contract season April 1st, found practically all of its mines shut down, not by its own action, but by the action of its customers in purchasing other coal—with the exception of one mine that was operating non-union. About the middle of 1925 the company re-opened one mine and subsequently other mines on a non-union basis, and gradually put all of its production on that basis, so that by the end of 1926 they were producing between twenty-five and thirty thousand tons of coal non-union.

The Ohio mines continued on that wage scale, that high Jacksonville Scale, until the first of April, 1927, as I recall it, and some of the other mines in the Pittsburgh District did likewise, and in other parts of Western Pennsylvania, but with the abrogation of that scale those mines generally went over to a non-union basis of operations, but they were not able to do so immediately. It was a long drawn out, difficult contest. Their production was adversely affected by it. There were not definite and reliable sources of supply for buyers. Our own company was (744) in a much better position because we had had that fight in 1925 and 1926 and non-union operations were well established in our mines and we were able to mine a pretty good [fol. 1305] tonnage of coal in 1927, and to a certain degree the effect of that labor trouble reached over into 1928 in the business of that company. That is, the labor troubles in the Ohio mines and some western Pennsylvania mines, more particularly in the figures reflected in eastern Ohio

generally, because we had a number of non-union producers in western Pennsylvania at that time, and in 1929 everyone was running on a non-union basis, or substantially everybody. It was a year of very large relative coal consumption, having allowed for the displacement of coal by competitive fuels, efficiency uses, etc. We all had pretty good business so far as tonnage was concerned, but not so far as price was concerned, and in 1930 and 1931 we have all been affected by the reduction in general business alike.

During these years our company made changes in its mining and marketing practices. In 1925 and 1926 the Pittsburgh Coal Company (745) concentrated its production in a small number of mines. We scrapped 36 mines, consolidated some of them with other mines, improved the productive capacity of those mines, built new and larger tipples, with better screening plants, put in new and modern preparation and cleaning plants and very generally improved the quality and the production methods of our coal, particularly the preparation of our coal. I might say that as a result of that program the tonnage of our own [fol. 1306] company increased in those years, and perhaps also in part due to the labor trouble of adjoining producers the tonnage of our company increased more than the tonnage of the United States as a whole up to 1927 and 1929 inclusive, and we were able to increase our business in that northeastern Ohio section by that means.

I think it is fair to say that those changes in practices of our company go also to the establishment of methods of preparing coal that were different and went beyond methods of preparation that had theretofore been used in the business. At any rate we were preparing our coal with a great deal more care, much more accurate and close classification of the coals, with some reference to reduction of ash and sulphur, improvement of the size of the coal, cleanliness of the preparation in every respect than probably any other producer in the country in 1928 and 1929. Since that time our example has been followed by most (746) of the other large producers in western Pennsylvania and some in Ohio, so some of them are now making also an excellent preparation of coal. I should also add, that that sort of preparation adds materially to the cost of putting coal on cars.

The Pittsburgh Coal Company owns approximately 140,000 acres of bituminous coal in the Pittsburgh seam in western Pennsylvania. About 80,000 acres of that coal is gas and by-product coking coal. 60,000 acres of it would [fol. 1307] classify as steam and domestic coal. Our production divides in about the same percentage. It varies from year to year depending upon the demand for different kinds of coal, but the capacity of the company to produce either of these grades of coal is much in excess of any output it has had in recent years. With the existing mines, the equipment and the labor supply we have, we could just about double the production we will have in 1932, with no additional capital expenditures.

If the demand were there, we could very readily locate and operate additional mines. We could open some of the mines that (746a) we have standing idle which were not scrapped, but have been kept to take the place of some of the present mines when they work out.

The steam and domestic coal in the Pittsburgh district is in the western end of the field and the gas coal in the eastern end, dividing it roughly.

By Mr. Bronson:

You can't draw any accurate line of demarcation. There is a gradual change in characteristics, starting at the foot of the Chestnut Ridge, the westernmost ridge of the Alleghenies—you have coal of about 29 per cent volatility and 8 per cent ash, and as you go northwest across the field, when you reach the Pennsylvania-West Virginia line you have coal at 38 per cent volatility and about the same ash, even lower than you have over there, but with sulphur running 1.7 per cent and up sometimes to 2 per cent and [fol. 1308] the physical character of the coal is different also. It is a harder structure and lower fusion temperature than the coal at the eastern edge of the field, so there is no place you can draw a hard and fast line. It is such a gradual change that the customer determines—one man will take coal for certain purposes from one mine and another will (746b) insist on having coal for the same purpose from a mine to the east of that location, and some other customer may prefer it a little to the west. It divides roughly, Mr. Bronson, about the location of your Number 8 on our Number 10 mine. To the east of that you could

pretty generally say it is generally gas coal and west of that steam. I would say those Number 8 and Number 10 mines are directly south of Pittsburgh.

By Mr. Gutheim:

It may occur that a customer may purchase coal, naming a particular mine, the coal of which I know may be good gas or metallurgical coal, but nevertheless he will use that coal for steam or domestic purposes. On the other hand you can't use the purely steam and domestic coal for gas, not without trouble.

In a general way I would say that since 1920 for twelve years the coal business has been through the most drastic (746c) and relentless deflation of any business in the United States. That is for twelve years, starting for instance with 1922, taking ten years, the reduction in the price at which bituminous coal has been sold at the mine [fol. 1309] is greater than the reduction in the price of any other commodity with which I am familiar except copper, and I think perhaps copper from its peak has dropped as much as coal.

In the case of our company, the price we are getting for coal today, with far superior preparation, a much better product than it was in 1922, is 30½ per cent of the average price we received in 1923—less than one-third. And I think that perhaps in that respect the trend of our company is not different than that of other companies. I suspect that there are some that perhaps have suffered more drastic declines in price than we, but all of us have been obliged to shrink our prices, not merely on account of the competition among ourselves but because of tremendous competition from competing fuels, notably fuel oil and natural gas. The consumer of the coal, the user of the coal does not think of his fuel cost in terms of f.o.b mine prices, he thinks of it in terms of cost to him at his plant. The situation is today that we have been trying to meet this competition of other fuels through constant reductions in the price of our coal at the mines, and (746d) that reduction has been passed right on through to the consumer, but it has become an increasingly small part of this fuel cost because the transportation charge on the coal, except for one reduction of 10 per cent, has not been reduced from its post-war peak. So that we have had relatively high

[fol. 1310] delivered costs of fuel here that have not been reduced jointly and completely to the ultimate user in the same proportion that other fuels that reach him by other means have been reduced. The coal business is suffering from that sort of competition in every field that I know anything about. We are inland at Pittsburgh, we are at some distance from gas and oil, nevertheless our own company in the last year has lost, as nearly as we can estimate, not less than 900,000 tons of business to oil, probably permanently lost now. It might not have been if it had been dealt with properly in time, but it may be gone now, because once you get a user of these other types of fuel he has made the capital expenditures and utilizes them, and it takes a good deal more than a mere equalization of fuel prices to get him back, because he has to scrap that investment he has in there.

I mentioned oil and gas, and we also have had some displacement of coal by hydroelectric power. Very close to our coal producing territory there is a new and very large development of natural gas. (746e) Nobody yet knows how large, or if they do they won't tell.

The constantly diminishing realization of the operator per ton of coal f. o. b. mine in the face of the constancy of the freight rates on coal at the 1922 level has been an increasingly burdensome handicap to overcome, as the purchaser of coal has sought for more economical fuels. It [fol. 1311] has been accentuated since 1929 by the effect of the depression in which every user of every commodity is making every effort he can to accomplish each possible economy, and we have had this movement away from coal, I would say, accentuated in the last year or two. I will not go into the import situation, because it is rather remote to this, but we do have competition from imports that we never anticipated a year ago would hit us, and I think the coal producers and railroads alike are in a condition in which both are suffering and have suffered and are going to suffer a whole lot more, because the delivered costs of fuel are higher than they ought to be and they are economically out of line.

(746f) It would be just an opinion, but from my knowledge of freight rates generally, and only generally, and from my knowledge of f. o. b. mine prices per ton definitely in a good many fields, I would say to the industrial consumer

—I am not speaking of the household customer—the transportation cost of the coal today must be on the average at least two-thirds of his total fuel cost, and in many cases it will be a great deal more than that.

With respect to the evidence here offered by the carriers that the percentage of bituminous coal tonnage to all railroad freight tonnage has increased during these last few years of business depression, I would say this, that the use of bituminous coal as a domestic fuel is fairly constant. [fol. 1312] There are between fifty-five and sixty million tons of bituminous coal used that way, and if the weather is reasonably cold in any year it is going to be used whether there is a depression or not, because people will have to keep warm, but the production of other commodities that move in traffic on these railroads can fluctuate very widely and very greatly, and without any question there has been a much greater reduction in the output of some of these other commodities that go into the total railroad traffic than there has been in the case of coal—the steel industry, for instance, running around 18 per cent for the current (747) year, and that is a good deal worse than coal is. We have a good deal more diversified uses for coal than the steel users have for steel. I do not anticipate that that results in any respect from any changes in freight rates. I say it is one of the misfortunes of the railroads today that there is no more coal moving under these transportation conditions than there is.

I know this northeastern Ohio industrial territory fairly well. It is territory wherein industrial developments progressed fairly well during the decade 1920 to 1930, and I would say that development was most pronounced in the iron and steel and manufacturing industries. That industry is a very large consumer of bituminous coal.

[fol. 1313] With reference to Kern's Exhibit 52, and the page 4 thereof which is a recapitulation of total tonnage to the destinations, Cleveland, Lorain, South Lorain, Akron, Canton, East Canton and Massillon, year by year, beginning with 1922 (748), I would say that 1922 was an abnormal year in the coal business, and the degree of displacement of normal coal tonnages in that year might affect your judgment of what has happened here, starting with that year. I can't say as to that.

For the sake of convenience I will follow the districts in this table just as they appear here. The tonnage from Ohio No. 8, Cambridge and Middle Districts are all grouped here. I observe that in 1922 they had a tonnage of approximately 4,200,000 tons of coal out of a total of 10,500,000 that went into this particular territory. That constituted about 40 per cent of the output. At the peak, which was in 1925, those Ohio districts show 5,700,000 tons out of 14,000,000 tons, or 40.4 per cent. Now as I said a (749) while ago, during 1924, 1925 and 1926 and into the spring of 1927 the Ohio operators were afflicted—and that is the word to use—were afflicted with this high wage scale under the [fol. 1314] Jacksonville Agreement and their production costs were at such a level that it was only reasonable to expect that they would lose tonnage relatively and absolutely, and when they undertook to break away from the Union in 1927 and their mines shut down they did lose tonnage, they could not help but lose tonnage, so that the decline in their peak tonnage from the high percentage in 1923, the decline that that production suffered in those years I would say can be attributed directly to the labor conditions in that district.

It was about April 1, 1925, that we were out of the market so that we were not competing with them over in that territory in that early part of 1926 and 1925. They were helping supply the market that ordinarily we would have supplied, as were some of our other competitors, having lost some of their business in 1927. The Ohio operators have had the problem of getting it back, and looking at these figures here, which I have not seen before, I would say that they have done a remarkably good job of getting it back. I notice they have here in 1930—let's go back to 1928—they had 18.6 per cent of the total shipments into these (750) districts; in 1929, practically 22 per cent; in 1930, 26.4 per cent, and in 1931 they are up to 33 per cent. They have held their tonnage there right straight through the depression years of 1930 and 1931. That in itself is a remarkable showing. I don't see anyone else here on this [fol. 1315] table able to do anything like that. They have increased absolutely and relatively. From the experience of my own company I would say if you gentlemen had before you the figures of their shipments into this territory since the first of August you would see a very decided in-

crease above those figures here. That opinion is based upon my knowledge of our own company's business. I do not mean that our company's business increased since then. Our company's business went off. The business of our company in 1923 in northeastern Ohio, in this territory here, constituted approximately 12 per cent of the total business of our company. Notice I am not talking about the business of northeastern Ohio, but our northeastern Ohio shipments were 12 per cent of our total shipments. In these years of 1927, 1928 and 1929, when the Ohio operators were being troubled with their labor and were largely out of the market, our tonnage increased, and it increased also because we were increasing the quality and preparation of our coal, and the percentage of our tonnage that went into northeastern Ohio in those years rose to 18 or 20 per cent. Since then our tonnage (751) into that territory has been falling off relative to our shipments generally, until in 1931 our shipments into northeastern Ohio were back at the 12 per cent figure they started with in 1923, but for 1932 they have been dropping still further and dropped very rapidly since the first of June. It is true [fol. 1316] that these reduced rates in Ohio did not go into effect until August first, but as Mr. Striebel testified, all of the consumers in Ohio knew this great reduction was imminent and they were holding off on their purchases, they were not taking any more shipments than they had to. The month of June, 1932, relatively was the lowest month of production in coal output since 1925, because nobody wanted to buy coal at that time, and this territory in northeastern Ohio was one in which that was markedly true. Today the proportion of our coal going into northeastern Ohio, although the Youngstown area is not affected by those rates and I have not grouped that with this Cleveland territory—now has dropped below 8 per cent. The extreme northeast section of the corner is not affected there, and we have had a very substantial and rapid loss during this year. So I say because our tonnage has gone that way and because I believe what has happened to us is characteristic of other producers at Pittsburgh who are on the same freight rates we are, I infer that the increase in the Ohio proportion to the shipments in this territory must be better now than the figures shown in Mr. Kern's exhibit. Now going to the other divisions (752), other Ohio

districts, the tonnage is not large and I am not going to make much comment upon it, because frankly I don't know much about it. The Pittsburgh district, I notice here, had 12 per cent of the shipments into that field in 1922 and had 20 per cent in 1931, but as I have said before, 1931 is not [fol. 1317] an indication of what has happened to us in that territory. What you gentlemen need to know about is what is happening to us right now, and Mr. Striebel has told you a better story than any of these figures can portray.

The tonnage for Connellsville shows a decided increase that is not surprising. Back in 1922 the Connellsville tonnage was 986,000 tons, and about 9.4 per cent, in 1928 it ran about 17.8 per cent and in 1931 the Connellsville tonnage ran 13.4 per cent. I notice it was 20.3 in 1929. That is obviously attributable to the change in the fuel supply of the blast furnaces. In 1922 they were shipping considerable quantities of beehive coke from the Connellsville field, but with the installation of by-products coking plants in connection with blast furnaces, this has brought about a condition whereby instead of shipping coke out of Connellsville they have shipped the coal to these by-product coking plants and there has been a decided increase from Connellsville in the form of coal as against coke, and that largely accounts for that movement there, and if you had the compensating figures for coke and could take the two together into account, you would find no (753) material change in Connellsville except it went down somewhat.

As to Fairmont, there is a very marked increase there. [fol. 1318] That is to be expected. The Fairmont operators have got away from union about the same time we did. Their wage scales are decidedly lower than ours, lower even than the Ohio scales. Many of the mines have favorable operating conditions, they are able to make the lowest prices for coal today that are being made in a good many competitive markets. This has been the case for a year or two and they have been right at the bottom of the price quotations. They have frankly gone out to sell their coals on a price basis, they have boasted that they could do it, and they have got their tonnage increased in northeastern Ohio.

The tonnage of the other Crescent districts has gone down. That, too, is to be expected. They have been in this territory on perhaps a temporary and artificial basis. During the years when the Ohio and Pennsylvania mines had these high wage scales and the southern fields were able to produce coal more cheaply, they were bound to enjoy a considerable share of this market, and as the wage scales have come more nearly together it is inevitable that they would lose some part of that business up there in that field. Then also there is the fact that there are certain users of captive coal that have closed down mines they had in the south fields, taking tonnage now from the northern district because they can get it more (754) cheaply. That, [fol. 1319] briefly, is the way this strikes me.

Cross-examination.

By Mr. Burgess:

I referred to the fact that domestic coal shipments have remained more or less constant during these years of depression as compared with shipments of commodities generally, and I should add to that, too, the fact that the same thing applies to the shipments of coal to artificial gas plants that supply cities. I did not specifically include that in the domestic coal. There would be a very considerable tonnage that would go there for that purpose also. It is not much affected by this depression. The shipments of metallurgical and steam coal to industries affected by the depression have gone down tremendously. The shipments our company has made of metallurgical coal, aside from that which goes to artificial gas plants which are supplying city gas users, taking the plants alone that supply metallurgical uses or consume (755) it for metallurgical uses, the shipments of that coal which our company is making have gone down in almost the same proportion that the production of those industries has fallen off.

In referring in one of my answers to the fact that the iron and steel industry in northeastern Ohio had increased or grown during the last ten year period, I was not speak- [fol. 1320] ing of the producing capacity of the steel mills in this territory. I was using that term in a very general way and describing not particularly blast furnaces or ingot steel production, but the secondary stage of the manufac-

tured steel products based on them. Northeastern Ohio has become quite a manufacturing center. That is what I had in mind. I was speaking of the secondary products of fabricating mills.

With reference to the percentage of 8 per cent, in connection with Youngstown, the statement I made there was that this figure I use, was approximately 8 per cent of our company's output that went into northeastern Ohio. That 8 per cent is Youngstown plus Cleveland, Youngstown and the extreme northeastern portion of Ohio, are not affected by rate changes, so that that drop from 12 to 8 per cent does not represent actually (756) what has happened to our company in the Cleveland territory. That is a great deal more than that. The percentage of coal of our company going into Youngstown this year and last year has been a great deal less than in prior years.

By Mr. Webber:

The increases in shipments from the Fairmont district to northeastern Ohio are mostly in the steam sizes, but there have been some increases in by-product business up there also. I was referring to 1931. I can't say what has happened to them in 1932.

[fol. 1321] V. G. Miller was called as a witness, and, having been duly sworn, testified as follows:

Direct examination.

By Mr. McVann:

(757) My name is V. G. Miller. I live at Columbus, Ohio, and am manager of the Columbus office of the Dickinson Fuel Company. I have been connected with that company eight years. The sales territory under my jurisdiction is Northeastern Ohio, generally. I visit the trade regularly and sell coal whenever I can to the retail coal dealers in such cities as Akron, Canton, Massillon, Cleveland, Lorain and other cities and towns in the same general territory.

The Dickinson Fuel Company ships its coal from mines located in the Kanawha district of West Virginia, on the C. & O. and Norfolk & Western Railroads—the Kanawha district and the Kenova-Thacker district. The rate of $2.39

a ton applies on coal from the mines to all the five cities mentioned. (758) We do not have any trade in that section in the smaller sizes of what is generally spoken of as steam or industrial coal.

We compete with all the coal, both high and low volatile, that is shipped into this consuming territory, from Ohio No. 8, Hocking and other Ohio districts, from Western Pennsylvania, from Northern West Virginia, and, of course, with coal shipped by other southern West Virginia producers. We also compete with low volatile Pennsyl- [fol. 1322] vania coal and with low volatile smokeless coal shipped from the Pocahontas and New River fields of southern West Virginia. The competition with the Ohio coals is the most intense and severe, both because of the materially lower freight rates and the improvement in preparation of the Ohio coals in recent years.

Speaking generally of the past three or four years, prior to the date of the recent reductions in the Ohio rates, taking Cleveland, the principal consuming point, as an example, the Hocking rate has been 1.89 and the Number 8 rate, $1.74, which gives Hocking an advantage of 50 cents and Number 8 an advantage of 65 cents over our coal. When the Hocking and No. 8 rates to Cleveland were (759) reduced in August by 29 cents per ton, our handicap since that time has been 79 cents in the case of the Hocking and 94 cents in the case of No. 8. There are also rates from other Ohio mines, nearer to Cleveland, which I believe are materially lower than the No. 8 rates.

The reductions in the Ohio rates have had some effect, of course, upon our sales of coal to the retail trade in Akron, Canton, Massillon, Cleveland and Lorain, because they have increased our handicap to the extent that the old spread has been widened, but it is too early yet to appraise the effect fully, and give you a definite reply. I understand figures have been submitted, both by the railroads and by the Property Owners Committee, which represents our dis- [fol. 1323] tricts, showing a progressive decline in the southern West Virginia coal tonnage in the five cities named, beginning with 1929 and coming down to October 31, 1932. The Dickinson Fuel Company has not, perhaps, lost business to as great an extent as some other West Virginia producers, but I think this may be fairly accounted for partly by the fact that we have a very high grade do-

mestic coal and partly by the fact that we have maintained an office here in Columbus for many years and have kept in daily touch, you might say, with the trade. But everybody (760) in the coal business knows that general business conditions have been such for the past couple of years that people have been buying the commodities they needed on a price basis, in order to get the greatest quantity for the least money. This has been especially true of household coal, and I think it has caused people in this northeastern section to turn more and more to Ohio coal, because it is the cheapest coal they can obtain. I know of retail dealers in this section who formerly handled only West Virginia coal, who have been obliged by this demand for the lower price Ohio coal to handle that coal. This, of course, reduces our market for coal.

Getting back to the question of the recent reduction in Ohio coal rates, I think I can honestly say that those reductions have increased the intensity of the competition and [fol. 1324] have affected our business, because they have enabled the Ohio producer to make a cheaper delivered price, but I can not at this early date give you any definite cases of specific sales lost for this reason alone.

There is no question but that the old differences prior to August 1st of 50 cents in the case of Hocking and 65 cents in the case of No. 8 enabled Ohio producers in those fields to undersell us at the northeastern Ohio destinations we have been discussing. That situation has always compelled us to offer our coal at a less price f. o. b. the mine (761) than the Ohio coals could command, although we know our coal is better in actual heat producing value. Taking this freight handicap and the improvement in preparation of the Ohio coals together, they will account for the steady dropping off of West Virginia tonnage in this territory for the past four years, and I feel sure that when we have had time to analyze this situation, we will find that the loss to West Virginia has been increased greatly in degree since the additional reductions were made in August, for the benefit of the Ohio mines.

Cross-examination.

By Mr. Bronson:

Our coal brings a higher price in the retail Cleveland market than Ohio No. 8. In Cleveland we are practically

barred out on high volatile coal from the southern fields. [fol. 1325] In Akron they have a price of $5.25 on Kentucky splint, which was made to rubber factories, and that is about top (762). I could not tell you the Ohio price, it would be a guess. They are advertising in the paper $3.75. That varies, some have $4.00, some have $4.25.

By Mr. Ballard:

The coal I am talking about is wholly domestic. We market no steam sizes in that territory. We have seven different mines and they would have seven different trade names. They are Dixlee, Black Band, Dixport, Suddeth, Dixflame, Red Robin, Dry Branch. I think that is the crowd. I may have missed one. I cannot tell the price range of those brands in Cleveland. The present mine prices vary from $1.00 to $1.50 on the various coals, four and five inch lump.

In 1931 we were practically barred from Cleveland, didn't pay any (763) attention to it last year. I am talking about high volatile altogether. In that same year, 1931, we had business in Columbus. I should hope so. We were practically barred from Cleveland on account of the freight rates on high volatile coal. We were not barred from Columbus. Anything I would say as to volume to Columbus would be a guess. I have no figures. It was substantial for 1931, but not as substantial as for 1930.

The difference between our freight differentials at Columbus and Cleveland in 1931 would be the same as it is now, barring the reduction on Ohio coal. Our freight is [fol. 1326] $1.89 from West Virginia (764). $1.26 and $1.89—that is the 63 cents. That is the differential of southern West Virginia and Ohio. Our rate at Cleveland was $2.39, as against $1.74, whatever it was. The differentials were practically the same. Cleveland has always been more or less a smokeless market, when they buy southern coals, and we have no smokeless coal. That's what barred us there. We didn't figure it barred us to work the territory.

I haven't looked at the figures I referred to showing the trend of the southern high volatile coals to northeastern Ohio by months, for 1932.

By Mr. Gutheim:

(765) I spoke of the price of coal in Akron for the rubber works. They agree with the rubber factories that they will

supply coal to the employes at a definite price. That price is available only to the employes of the rubber company during the heating season. The other prices are any price you care to make. The price of $5.25 makes it almost necessarily the general retail price. The general retail price is not higher. They arrive at this price with the rubber factories early in the season. That is what demoralized the business over there, and it is usually lower than it should be. We don't make the price lower. We have nothing to do with it. The dealer makes it, but it almost sets the price [fol. 1327] that they pay for southern coal (766). When I say that it demoralizes the price I mean it breaks any other price level for that coal. Almost everybody gets $5.25. A lot of people who are not as conversant with what is going on in the coal business would call up and ask the dealer the price on coal and he would say $5.50 and sell it. That is, he might ask $5.75.

By Mr. Herrold:

I stated our mines are located in the Kanawha, Kenova and Thacker districts. We are operating seven mines. Two of them are on the New York Central. I did not mention the New York Central before. They are located at Cinco and Swiss (767). All of it is high volatile coal. I could not tell you what percentage of all shipments from our mines we shipped into the territory directly involved in this proceeding, because that is all handled through our general office through Charleston, and we ship coal through jobbers.

By Mr. Burgess:

We sold coal from the districts I have referred to to Canton, Akron and Massillon in 1929, 1930 and 1931, for the domestic trade.

[fol. 1328] Roy Heyser was called as a witness and having been duly sworn, testified as follows:

Direct examination.

By Mr. Keeler:

My name is Roy Heyser. I am employed by the New England Coal & Coke Company, which is a subsidiary of

the New England Fuel & Transportation Company, one of the complainants in the case pending before the Commission (768). I am the district sales manager in the Cleveland office, with headquarters in Cleveland. I live in Cleveland and personally call on the trade in this northeastern Ohio district. I have held my present position since the office was opened in July 1931. Prior to becoming employed by the New England Coal & Coke Company, I had eight years' experience in the selling of coal.

Of the mines of the New England Fuel & Transportation Company, Federal No. 1 is located at Grant Town, Marion County, served by the Monongahela and the B. & O. Federal No. 3 is located at Everettsdale, Monongalia County, and is served by the Monongahela Railway. That county is in Northern West Virginia (769). Federal No. 1 coal we would consider as a general purpose coal, adapted to metallurgical, by-product, gas, steam and domestic use. Federal No. 3 is strictly a steam and domestic coal.

I consider the northeast section of Ohio involved in these cases a natural and logical market for our coal produced on the Monongahela Railway in West Virginia. Our com- [fol. 1329] pany in the past has shipped quite extensively into this area. The Cleveland office has no record of 1930 shipments, but in 1931 our tonnage was considerably more than half a million tons. In shipping coal into northeastern Ohio we come in competition with Ohio, Connellsville, Pittsburgh, some other western Pennsylvania, but not much (770). We have naturally a lesser percentage of competition with the southern fields, southern West Virginia. Our principal competition comes from western Pennsylvania and the Ohio fields. Our coal in the past has been sold in northeastern Ohio for the various uses I enumerated it was suitable for.

Referring to the testimony of other witnesses with regard to the decline in the price level on coal over a period of years, going back as far as 1920, my experience has been that prices have gradually declined since those years, during those years. Naturally this decline in prices has made it more difficult for the mines which take arbitraries over other mines, such as, for example, your mines over the Ohio field, to absorb the differential which existed prior to the reductions which were made about August 1st, in the Ohio rates (771). I personally call on the trade in this northeast-

ern section. Prior to August 1st I noticed the difficulties developing in connection with the sale of our coal in that area, and that came about by reason of rumors of the possibility of a reduction in freight rates in the Ohio field. I found quite considerable resistance on the part of purchasers to enter into contracts or make commitments for [fol. 1330] purchases after August 1st. The mere rumor or expectancy of a reduction had an effect on our business. The resistance after August 1st, when the reductions were actually made, was simply expressed in a few words, that it was just too bad, I am sorry, but we can't buy your coal on this differential in freight. In other words, our customers have predicated their disinclination to purchase our coal on the freight rate situation, the fact that our rates were so much higher than the Ohio (772) rates. We had some regular customers in this area who were taking coal from us regularly prior to the reduction in freight rates. We had one contract that unfortunately expired on August 1st, and we had not been able to sell them any coal since, but until recently I don't know whether they have since contracted or not, but until recently they were holding it open, hoping there would be some adjustment in this freight rate. We had some business that were current running orders, all of which have been suspended, and were suspended when the rates went into effect. We have not been able to make a price on our coal that would enable us to compete with the Ohio coal.

Based on our expectancy of business in this Ohio field, for the year commencing August 1st, the loss of business on specific contracts that have expired, the loss of business due to stopping of purchases by our regular customers, I estimate we have lost for this year, starting August 1st, as [fol. 1331] the result of these reductions in freight rates from the Ohio field and to the Pittsburgh and West Virginia mines, of approximately 200,000 tons (773). That would carry up to August 1st of this year, considering the actual tonnage that we had on our books in contract and in current orders, running orders. I do not feel that this loss of tonnage that I have mentioned represents the full effect of these reductions in that business in subsequent years if the rate situation is not corrected. I will answer what I anticipate will be the ultimate result of this situation if it is not corrected, by saying that I have already written a

recommendation to our Boston office that they close the office. In other words, I think there is no use trying to do business there any longer if this freight rate situation is not corrected, so far as our coal is concerned.

Our mines are located in what is known as the Fairmont district and take the $1.99 rate to Cleveland.

Cross-examination.

By Mr. Gutheim:

I have sold both special purpose coal and the steam and domestic coal in Cleveland. Our by-product business up to this year has been quite the larger proportion of the total. I would say we were going pretty good after opening the office until these rate reductions came along.

[fol. 1332] By Mr. Ballard:

Before our recent losses of business, a considerably larger portion of our tonnage was from Federal No. 1. In the light of these 200,000 tons loss, it would be practically 90 per cent of Federal No. 1. It used to be probably the same proportion. I mean to say that the percentage of our Federal No. 1 going into Cleveland has always been 90 per cent of the total tonnage moved into that district, and it still is. (775) I would say we are moving into Cleveland now between five and eight thousand tons a month of our coal for domestic use assumedly so, because it is going to dealers. I don't know whether they are selling it for steam or what, but it is going to the dealers. That is all Federal No. 1 business. I occasionally sell some Federal No. 3 in Cleveland for domestic purposes, but it is so small it does not amount to much. I testified that our fuel was used for metallurgical, by-products, gas, steam and domestic purposes. Of the total Federal No. 1, the percentage for domestic purposes would be a difference between the amount of tonnage we are moving in there and the tonnage I have stated we are moving (776) to the dealers—between five and eight thousand tons to the dealers. I gave you the figures for 1931, from Federal No. 1. I am unable to give you the figures for 1932 because we haven't got them yet. It would be more than five or eight thousand tons in 1931. I would say half of the total of the Federal No. 1 tonnage is now moving for domestic

[fol. 1333] purposes. I can't give you the figure accurately for 1931 because I have no figures before me. I don't know. The five to eight thousand tons is moving this year for domestic purposes. That movement is based on the twelve months beginning in July, I would say. We have lost considerable domestic business that we would have enjoyed had it not been for this reduction of freight rates on August 1, and I can cite you to one specific piece of business we lost of approxiamtely 73,000 tons. (777) That went to the Ohio coal.

I have estimated that from five to eight thousand tons of domestic coal moved from this Federal No. 1 to Cleveland during what I call the current year, beginning in July. I would say the corresponding figure for the preceding year would be 2500 tons a month.

This coal is sold under the trade name "Federal." The prices on domestic coal f. o. b. mines range from 90 cents to $1.10.

Redirect examination.

By Mr. Keeler:

(778) The Federal No. 3 coal is suitable only for domestic and steam purposes. The Federal No. 1 is suitable for the various purposes which I mentioned a while ago. It has been shipped for steam and domestic. I absolutely did not intend to convey the impression that our movements of that coal were only for by-products and gas purposes.

Recross-examination.

By Mr. Ballard:

I stated that in 1931 we shipped about 2500 tons of domestic coal to Cleveland. I can't answer how much domestic coal we shipped to northeastern Ohio in that same [fol. 1334] period because I personally did not handle (779) that end of it. We had an arrangement with the Capital Fuel Company, who sold their domestic coal outside of the Cleveland area. I gave the total figure for northeastern Ohio in 1931, but I don't know how much of that was domestic.

By Mr. Bronson:

We are shipping approximately five to eight thousand tons of coal from our Federal No. 1 for domestic use in Cleveland. Refefring to the figure of 500,000 tons last year, I would think we shipped less domestic coal in that year preceding July 1st than for the subsequent period. I have no figures to substantiate that. As to our present shipments of domestic coal to Cleveland being greater than when we were shipping 500,000 tons a year all told, that can be explained in this way. Previous to July, 1931, our office was located in Pittsburgh. Now that trade was not properly worked, and by contacting with it we have secured (780) approximately that amount of tonnage which would probably show an increase in domestic and other coal, as I have said.

By Mr. Keeler:

It is correct that last year I was contacting with the trade, building up good will and getting into shape to handle what I expected would be a considerable business, a nice business in that area this year; also that I had made certain estimates as to the amount of business I would be able to do, and the result of these freight rate reductions has dislocated my program and has resulted in my being [fol. 1335] unable to dispose of the coal that I had reasonable expectation of being able to sell.

By Mr. Herrold:

The falling off of our shipments of coal into Cleveland before there was any reduction made in the Ohio rates, was due to the loss of one contract which we had there. The tonnage I have given you here is the estimated tonnage we would lose. We did not take into consideration previous (781) lost tonnage.

The Cleveland office was established in Cleveland in July 1931, and I came there to open it.

G. J. EICHENLAUB was called as a witness and, having been duly sworn, testified as follows:

Direct examination.

By Mr. Keeler:

My name is G. J Eichenlaub. I am employed by Continental Coal Company as District Sales Manager, and have held that position three years. I am in charge of the sales of coal for that company in the northeastern section of Ohio involved in this proceeding.

The mines of the Continental Coal Company are located in northern West Virginia, what is known as the Fairmont district, (782) on the Monongahela Railroad, and the coal which our company produces in that section is principally steam and some domestic. We have shipped rather extensively into this area both domestic and steam coal—[fol. 1336] largely steam. Our shipments were approximately 500,000 tons in 1930 and 400,000 tons in 1931. We meet competition in northeastern Ohio from other coals produced principally in Ohio and Western Pennsylvania and some competition from the southern fields.

I have heard the testimony of Mr. Morrow and Mr. Heyser with regard to the reduction in prices of coal over a period of years extending back to 1920. Prices have been declining since 1920. The decline in the price of coal has made it more difficult to absorb the differential. (783) That situation has been gradually growing worse.

Prior to August 1st, when this contemplated reduction was talked of, we did encounter trouble. Our customers wanted to wait and see what the outcome of the reduction would be, if any. After the reduction became effective our difficulties increased. With declining prices we were not able to go ahead and meet delivered prices that were established by the Ohio operators principally. We have had a loss of regular customers that we have been shipping to. In attempting to make sales, we were distinctly told that we would have a certain delivered price we would have to meet and that delivered price (784) we were not able to meet.

Based on my estimate of business in the northeastern Ohio section, we figure our loss will be somewhere around 300,000 tons, attributable to the reductions that have been

made in the Ohio rates. At this time I can't say what the [fol. 1337] ultimate loss will be. We have no way of determining it.

We have estimated that 300,000 tons over a period of a year, beginning August 1st.

Cross-examination.

By Mr. Bronson:

The great bulk of our coal is steam coal sold in the Cleveland and the northeastern Ohio section. A large percentage of it is slack coal, although we have contracts on other sizes as well and spot business also. Our freight rate differential is the differential between $1.99 and $1.45 into Cleveland.

(785) As to the price for slack f. o. b. mine, generally speaking, every district has been affected, due to the fact that there is no industrial business to speak of. The price is very low, as compared to the prepared size price. It is below 90 cents. I don't care to say what it is.

By Mr. Burgess:

We did sell this steam coal of ours in Canton and Massillon in 1931. In that particular northeastern section we sold to a large extent. Our big destination was Akron. (786) We sold some slack coal in Canton and Massillon, but not to the same extent that we did in Akron. I don't have those figures. I did not include Youngstown as one of the destinations in my computations. We sell some slack coal in Youngstown, but not our northern West Virginia slack there.

By Mr. Herrold:

The coal we sell in Youngstown is drawn from western [fol. 1338] Pennsylvania mines. We don't own mines in western Pennsylvania. We are sales agents.

Testimony Taken at Columbus, Ohio, December 20, 1932

Mr. Gutheim: Mr. Examiner, in the course of Mr. Boden's cross-examination there were a great many questions put to him with respect to how he had computed his distances,

and he answered uniformly that our distances were all computed over all the lines via all the routes. I went over that whole matter with Mr. Boden last night and that answer is correct with respect to all the distances from Ohio and Inner Crescent and Outer Crescent mines and all of the tariff references supporting the distances are in his exhibits. On the same tariff references supporting his exhibits you will find the reference to decisions or a decision of the commission. That decision or those decisions of the commission are decisions in which the rates and distances from Illinois and Indiana mines which Mr. Boden shows in his exhibit appear, and I want it understood that the distances which he shows on his exhibits from Illinois and Indiana mines are as reported by the commission in the cases cited by him and are not computed by him originally from all mines and via all routes.

Mr. Ballard: May I ask a question in elaboration of that? I understand Mr. Boden to say to me on cross examination (788) that he also used tariff origins that were [fol. 1339] not mines. Is this intended to modify that?

Mr. Gutheim: No.

Mr. Ballard: So it is not a mine list?

Mr. Gutheim: It is whatever he said in that respect. I am not endeavoring to correct his testimony at all.

[fol. 1340] LAWRENCE PETERSEN was called as a witness and having been duly sworn, testified as follows:

Direct examination.

By Mr. Keeler:

(789) My name is Lawrence Petersen. I am employed by the Koppers Company and associated and affiliated concerns, as Commerce Agent. I have been so employed eight years. During all of that time I have been in the Traffic Department and associated with rates and other traffic matters of the various Koppers interests. Prior to that I had about seven years experience in commercial and railroad traffic departments, principally rate departments. (790) I have three exhibits to present at this time. These are true and correct to the best of my knowledge and belief.

My first exhibit, No. 126, is a map showing the Ohio, Pennsylvania and northern West Virginia origin rate groups. This map is similar to other maps introduced in this case, except as to northern West Virginia. I have divided the northern West Virginia region into the various districts as set forth in the tariff. Fairmont No. 2 is served by the Monongahela Railway exclusively, except that portion which overlaps Fairmont No. 1, which consists of a branch line extending from Riversville to Grant Town. This branch line is served jointly by the Monongahela Railway and the Baltimore & Ohio under lease or trackage right agreement.

(Complainant's Exhibit No. 126, Witness Petersen, received in evidence.)

[fol. 1341] There is one small origin district in northern West Virginia known as the Opekiska district that I did not set forth on this map. (791) That extends from the northeastern line of the Fairmont No. 1 district to the Pennsylvania-West Virginia state line, taking in Morgantown. There has been but one mine operating in that district in the past year or year and a half, I believe. The Middle or Massillon districts do not appear on this exhibit. They are shown on other exhibits that have been introduced in this case.

Exhibit No. 127 shows the distances from the Monongahela Railway mines in West Virginia to the junctions with connecting lines.

(Complainants' Exhibit No. 127, Witness Petersen, received in evidence.)

The Monongahela Railway connections with the P. & L. E. and the P. R. R. are at Brownsville Junction, Pa., and with the B. & O. at Lackrone, Pa., and Rivesville, West Va. Sheet 1 shows the average distances from all tariff origins and active mines listed on the following pages. Sheets 2 and 3 (792) cover mines active for the periods indicated at the bottom of sheet 3, and sheets 4 and 5 cover all tariff origins. The tariff origins listed on pages 4 and 5 include origins named in tariffs of the P. R. R., P. & L. E. and B. & O., but the exhibit does not repeat origin points contained in tariffs of all three of the carriers named. In other words, if a station or mine is listed in a tariff of all

three rate publishing lines, it appears only once, on sheets 4 & 5. In that respect my exhibit differs somewhat from [fol. 1342] other exhibits that have been introduced in this case. I believe the other exhibits show the tariff origins as they appear in all three tariffs, and repeat them, wherever they are repeated in each of the three tariffs.

The authority for my distances in the fourth and fifth pages is the Monongahela Railway Distance Table, I. C. C., I think it is 218. These are distances up to the connections of the B. & O.

My next exhibit, No. 128, shows the distances from Monongahela Railway mines in West Virginia to various northeastern Ohio points via each of the existing routes and the average distance via all routes. The explanation of columns 1, 2 and 3 is shown (793) at the bottom of the exhibit.

(Complainants' Exhibit 128, Witness Petersen, received in evidence.)

I do not have the citations for the tariffs I used in compiling these distances, but they are the Official Distance Tables published by the various lines. This exhibit may be subject to the technical criticism that the averages shown are averages of averages, but it would result in no different answer, because in each instance we are using the same number of mines, so it would not make any difference whether you had the total distance from all the mines to the destinations via each route and divided that by the total number of mines, multiplied by the number of routes. [fol. 1343] The result would be just exactly the same.

Cross-examination.

By Mr. Bronson:

(795) Referring to Exhibit No. 127, and the statement that my figures are based on four active mines, January 1, 1929 to March 31, 1930, you will observe I show it three ways. I also show it for the period July 1, 1931 to September 15, 1932, which is the figures the carriers used in this case. Column 1 is all tariff origins. The Opekiska district on the B. & O. is not included on this map. I explained

that was not included on the map and I tried to give you about the location of it. It is in the record.

By Mr. Gutheim:

(796) Referring to the map, Exhibit 126, to certain points everything below Fairmont Number 2 is grouped at the same rate. To certain other points there is a split-up in the rate. Confining my attention to the split-up of the northern West Virginia origin territory as shown on this map, so far the tariff naming the rates is concerned, the split-up is throughout the entire tariff. It does happen that to a number of destinations the rates from each of these groups are the same, but they are indicated as separate and distinct origin groups. (797) Taking, for instance, Youngstown, there are two different rates. I have not shown Youngstown in any of my exhibits. I don't know that I have the information as to what the rates are and from where they apply, with me. The rates from all of this northern West Virginia origin district territory [fol. 1344] to Cleveland are the same. They are published as individual rates from these split-up districts. The Akron rate from Fairmont No. 2 is $1.87. The rate from Fairmont No. 1 and all of the origin districts shown south of Fairmont No. 1 is $1.82. That is from the B. & O. (798) To Canton the rate from Fairmont No. 2 is $1.84 and from Fairmont No. 1 and all of the origin groups south of Fairmont No. 1, $1.82. To Massillon the rate from Fairmont No. 2 is $1.87; from Fairmont No. 1, Monongah, Short Line and Clarksburg, $1.65, and from the groups south of Clarksburg $1.77; to Lorain all of the Northern West Virginia origin groups are rated the same, $1.99. That is also the rate to Cleveland.

There is no territory in northeastern Ohio to which the rates from all of these various districts shown by me on this map in Northern West Virginia are different.

(799) This split-up of these Northern West Virginia Districts is not a split-up that obtains with respect to the rates to the Buffalo-Rochester territory, rather than with respect to the rates to the Ohio territory.

With respect to the Freeport District, and this showing of the line of the Pennsylvania from Kiskiminetas Junction and up to Butler, I did not go into that particular. The

map is an exact copy of the old I. & S. 744 map except insofar as Northern West Virginia is concerned. I did not go into any of the details concerning the other districts except to copy the I. & S. 774 map. (800) I know that map is cor- [fol. 1345] rect, at least substantially correct in connection with all of these Ohio and Pennsylvania Districts and as to Northern West Virginia I did not follow the I. & S. 774 map at all, but mapped it out myself in the tariff. I wouldn't say it is correct as to that particular Freeport District.

The through distances from mines to destinations appear on Exhibit 128, Columns 1, 2, and 3. Exhibit 127 gives the average distances from all the mines to the junction with connecting lines. Exhibit 128 shows the distance beyond the junction point. The total of the two gives you the through distance. That would not be so exactly in connection with the B. & O. route, because from the Monongahela Railway mines in connection with the B. & O., some of (801) the shortest distances are made through Leckrone, and some of them through Rivesville, but by far the greater majority through Rivesville, and it will give you almost the same figure as indicated on Exhibit 128.

Referring to Exhibit 128, the distance from Brownsville Junction to Cleveland via the P. & L. E.—Youngstown—Erie R. R. is 185.3 miles. The distance under column 3 from the Monongahela Railway mines in West Virginia to Brownsville Junction is 49.4 miles. That is on Exhibit 127. The total of the two is 234.7 miles, shown in column 3, Exhibit 128. What I stated with reference to my computation of distances via the B. & O. was that the total of the distance shown on Exhibit 127 or that the average distance shown on 127, combined with the distance shown from [fol. 1346] Rivesville on 128, may not give you exactly the figures shown for the through distance. It may be that those particular destinations, there (802) would not be that exception. If you will wait just a minute I will see. No, that particular exception I mention would not apply to any of the destination points shown here. I do not show on any of these exhibits any distances from any mines except those on the Monongahela Railway. Some of the complaints in our particular complaint were located elsewhere than on the Monongahela Railway. I don't show any dis-

tances from their other mines, not located on the Monongahela Railway. In some of these origin districts, the rates against which we complained, some of these complainants have mines distances from which have been figured and included on this exhibit.

By Mr. Ballard:

(803) As to whether any sub-districts in Exhibit 126 are in what has been called on this record the Fairmont District—I have not been able to find out what has been called the Fairmont District.

Referring to Kern's Exhibit 17, showing the districts in northern West Virginia, commencing just north of Weston on the B. & O. and running to the Pennsylvania state line, labeled "Fairmont District," the following sub-districts on my Exhibit 126 are within that Fairmont district: Fairmont No. 2, Fairmont No. 1, Monongah, Short Line, and Clarksburg.

[fol. 1347] The distances on Exhibit 128 represent all the mines on the Monogahela Railway, which is a separate and distinct group of mines in the tariffs. It is separate and distinct from the rest of the Fairmont District. That is Fairmont No. 2. (804) It is difficult to draw a map and leave out mines that are served jointly by two carriers, and I explained that in my testimony.

As to mines on the Monongahela Railway only, you can draw a line around them and you have in that line only mines on the Monongahela Railway, and no other mines: When you come to joint mines, the Monongahela and the B. & O. railroads serve them. The distances are figured only from the Monongahela Railway mines via the Monongahela Railway. The distances do not take into account any figures in connection with the B. & O. at all. That is true even though you are using the all tariff route formula. We excluded the B. & O. routes because our complaint attacked only rates from the Monongahela Railway mines, it did not include any (805) mines on the B. & O. Railroad. That would mean that if our complaint was successful the reductions would only apply via the Monongahela unless the B. & O. wanted to meet the rates of the Monongahela. The order we are seeking would apply only to the Monongahela routes. It is correct that I have selected certain

routes via which I attack the rates and I confine my distance computation to those routes.

I haven't shown anything here to determine what the effect on the remainder of the Fairmont district would be if the mines on our Exhibit 128 were removed from it.

[fol. 1348] (808) It is true that the elimination of the Fairmont No. 2 District as described by me would leave in the Fairmont District as described generally in this record not only the other sub-districts shown on my Exhibit 126, but also the Opekiska District, with this exception, that I don't believe Mr. Kern included in the Fairmont District figures—I don't know whether he did or not—the Upshire, Belington, Roaring Creek and Junior Districts.

So far as the active mines' list of Mr. Kern is concerned he did include active mines in the Belington District. He did not show any in Upshire, Roaring Creek and Junior Districts. If there were active mines I don't know whether or not he would include them. I do not intend to change the answer I gave a moment ago when I looked at Mr. Kern's exhibit. I described there the border line covered by Mr. Kern's exhibit. In other words, Mr. Kern's exhibit went down to and including the Clarksburg district. I say in his list of active mines—we were speaking about the map a moment ago—in his list of active mines he has included not only everything in Clarksburg and north, but mines in the Belington District. (809) I mean he included them as Fairmont mines. I don't believe the Belington District should be called the Fairmont District, but when Mr. Kern lists his active mines from the Fairmont District he includes mines in the Belington District.

[fol. 1349] If our Monongahela Railway mines should be eliminated from the distance and a computation were to be made of the average distance from the district as it would then remain, I should say that computation should include the distances from our mines via the B. & O.

I might say that that is the situation now to a number of these destination points, and for the purpose of our complaint, the joint mines have a dual status, they are Monongahela Railway mines, and for the purposes of what will be left in the district after we have gotten out they are B. & O. mines. The rates from these mines via the B. & O. are lower than they are from the same mines via the Monongahela Railway.

(810) Referring to Exhibt 128, with respect to the Cleveland destination, the figure 235.3 represents the B. & O. distance from Rivesville to Cleveland, set out in the B. & O. distance table.

Redirect examination.

By Mr. Keeler:

The rate from Monongahela Railway mines in West Virginia to Akron, Ohio is $1.87; to Mansfield, Ohio, $2.13. I have not shown Huron, but I believe the rate is $1.99.

Kern's exhibit shows some active mines in the Belington District which he has included in his Fairmont list. He has not indicated any active mines in Upshire, Roaring Creek, or the Junior Districts. It is my understanding from that [fol. 1350] there are no active mines in those districts at the present time (811).

[fol. 1351] By Mr. Burgess:

I am speaking of Monongahela Railway rates. I gave that figure of $1.84 as the rate to Canton from those same origins, which is three cents less than the Akron rate.

Referring to the distances shown on Exhibit 128 to Canton via the B. & O. as 233.3 miles from all tariff origins, to Akron 214.1, and to Massillon 183.9, I used the through distance as set forth in the B. & O. distance table. I did not try to figure out via which junction points the B. & O. figure their shortest distance between Rivesville and Canton, Massillon or Akron. The tariff indicates via the B. & O. direct. That is the only tariff route shown.

By Mr. Lorenz:

(812) The rate from Fairmont No. 2, that is, the Monongahela Railway mines to Akron is $1.87. The rate from the B. & O. mines in Fairmont No. 1 and other Northern West Virginia origin districts south of Fairmont No. 1 is $1.82. We do not have the same situation at Cleveland. The rate from all the Northern West Virginia origin districts to Cleveland is $1.99, including mines on the Monongahela Railway.

[fol. 1352] David Shaw Archer was called as a witness and having been duly sworn, testified as follows:

Direct examination.

By Mr. Herrold:

(814) My name is David Shaw Archer, Assistant Secretary for The Public Utilities Commission of Ohio, Columbus, Ohio. I have been with the Commission and its predecessors for thirty-three and a half years. I have been the Assistant Secretary since 1917. In that position I have charge of the docketing of complaints involving the lawfulness of railroad rates and charges and the filing of papers, etc., in such cases. The file handed me is one which bears the certification prepared under my direction of copies of the complaints and other pleadings, the testimony and exhibits offered and introduced at the hearings thereupon, the Commission's orders which were dated June 30, 1932, and July 26, 1932, the petition of the defendants for rehearing, and a copy of the entry denying such petition for rehearing in the proceeding before the Commission, No. 7252, wherein The Republic Steel Corporation was complainant and The Baltimore & Ohio Railroad Company and others were defendants. This file contains all of the documents in our original file save the correspondence. (816) The briefs are not here because we do not permanently retain the briefs. The file was checked in my presence against the original papers in the record in Docket 7252, and the certificate prepared following this check.

[fol. 1353] Mr. Herrold: Mr. Examiner, this is the record, a true and correct copy of the record that was made before the Ohio Commission in The Republic Steel Corporation case, as Mr. Archer stated, Docket 7252, and this is the record, of course, upon which the Ohio Commission relied in entering its decision in said Docket 7252. These cases have grown out of the decision of the Public Utilities Commission of Ohio in that particular case. If there are no objections I desire to offer the file in evidence as our Exhibit 129.

(Argument had by counsel 817-822).

Exam. Trezise: In connection with Exhibit 129, offered by Mr. Herrold, the Examiner understands that Mr. Gutheim has withdrawn his objection as to copies of the exhibit and Mr. Herrold has agreed to furnish such portion as Mr.

Gutheim desires. That leaves no objection so far as meeting the rule as to the furnishing of copy. Is the Examiner correct in that? I hear no objection to that. And it is further understood that Mr. Orcutt has objection because all of the proceedings in connection with these rates, proceedings before the Ohio Commission, are not presented in this record. Mr. Herrold has agreed, the Examiner understands, to complete Exhibit (823) No. 129 by including the entire proceedings, and under those circumstances the Examiner will accept Exhibit 129.

[fol. 1354] R. A. ELDRIDGE was called as a witness and, having been duly sworn, testified as follows:

Direct examination.

By Mr. Burgess:

(825) My name is R. A. Eldridge. I am a resident of Youngstown, Ohio. I am employed as Special Agent in the Traffic Department of the Republic Steel Corporation, in charge of the Rate Department of that company. I have held that position since June, 1930. Prior to the time I took my present position I was Assistant Traffic Manager of the Youngstown Chamber of Commerce. I was with that organization for about ten years. Prior to that time I was connected with the Traffic Department of the Trueson Steel Company, of Youngstown, for one year, and prior to that I was employed with the Pennsylvania Railroad at Youngstown for a period of approximately five years.

Among the plants of the Republic Steel Corporation are plants located in the so-called Youngstown district and also at Canton and Massillon, Ohio. It has plants located at other points such as Buffalo, New York, Chicago and Moline, Illinois. Its largest plants, however, are located (826) in the Youngstown district and the Canton-Massillon district.

The maximum coal requirements of the plants of the Republic Steel Corporation located in the Youngstown District and in the Canton-Massillon District are about 4,500,000 tons per year. This tonnage may be divided into [fol. 1355] 2,500,000 tons of high volatile coal used in our

coke plants in the Youngstown District and at Canton and Massillon; 504,000 tons of low volatile coal used in such coke plants; 716,000 tons of gas coal and 780,000 tons of steam coal.

The tonnage figures taken from the reports of the Ohio Bureau of Coal Statistics, shown on Mr. Kern's Exhibit 58, indicate that Youngstown and the Mahoning Valley group, in 1928 received 7,535,796 tons of coal, of which 45,897 tons was coal from the Ohio producing groups and the balance was from the Inner and Outer Crescents. The tonnages for other years are also shown on this exhibit. Of the tonnage for the year 1928, the Youngstown switching district received approximately 6,500,000 tons, practically all of which was coal for the iron and steel industry located in the Youngstown switching district. Only 445,000 tons of this amount represented domestic fuel coal and 100,000 tons steam coal consumed by small industries in Youngstown. In other words (827) of the total tonnage shown on Exhibit 58, of 7,535,796 tons moved to Youngstown and the Mahoning Valley, approximately 6,000,000 tons moved to the steel industries in the Youngstown switching district. Most of this coal moved from the Pittsburgh, Connellsville and Freeport districts. In normal business years this coal moved in trainload lots, from the scales adjacent to the mine in the mining districts to the plants at Youngstown. [fol. 1356] The average carloading of this coal received by the steel industries in the Youngstown district averages over 70 tons per car, as was stated by the Commission in its decision in the case involving ex-river rates from Conway and Colona to Youngstown, I. & S. Docket 3282, 163 I. C. C. at page 8. The average loading for the first 11 months of this year to the plants of the Republic Steel Corporation in the Youngstown district has exceeded 72 tons per car. As a matter of fact, the average loading of this coal per car is entirely dependent upon the size of cars which are furnished by the carriers for its transportation, because the steel industries in the Youngstown District desire to receive the coal in as few cars as possible. In other words, there is no limitation upon the loading of cars of coal to the steel industries except the axle carrying (828) and cubical capacity of the cars furnished.

Referring to the fact that Exhibit 58 indicates that there has been a downward trend in the receipt of the Inner and

Outer Crescent coals in the Youngstown district since 1929, and that Exhibit 60, covering the first six months of the year 1932, shows this trend is continuing, I attribute that to the fact that the steel mills in the Youngstown district are not using as large an amount of metallurgical and steam coal as they used in 1929 and previous years. The decline in the shipments of coal to the steel mills in the Youngstown district is due in part to the general business depres-
[fol. 1357] sion which has the effect of making competition keener for steel orders. The steel mills in the Youngstown district are handicapped by higher operating costs than many of their competitors located in the Pittsburgh and Wheeling districts and at points on the Great Lakes, due to the fact that they are required to use rail transportation on all of their raw materials as well as on their outbound shipments of steel, while coal moves by river to the steel mills in the Pittsburgh and Wheeling districts and iron ore, flux stone and scrap metal and other raw materials move into the steel mills on the Great Lakes by water. Many shipments of steel articles also move outbound by river from mills in the Pittsburgh and Wheeling districts and by lake from mills at points on the Great Lakes. The effect of this situation (829) upon the steel mills in the Youngstown district is described in the decision in Finance Docket 6754 (150 I. C. C. 43). The decline in the coal shipments to the Youngstown district steel mills is also due to the fact that orders for steel which formerly had been filled by the Youngstown mills are now being filled by mills of the same companies located at points on the Great Lakes.

To cite a specific example of the transfer of steel tonnage which formerly was produced at Youngstown, I can refer to the transfer of tonnage which formerly was produced at the Youngstown plants of the Republic Steel Corporation and which would logically be produced at their inland plants, such as those located in the Youngstown district or Canton-
[fol. 1358] Massillon District to our plants at Buffalo and Chicago. For example, we are now transporting 15,000 tons of pig iron from our furnaces at Buffalo, New York to our plants at Canton and Massillon. This pig iron moved by lake from Buffalo to Cleveland and is being transported from Cleveland by rail to Canton and Massillon at the rate of $1.26 per gross ton. The rate from Youngstown to Canton and Massillon on pig iron is likewise $1.26 gross ton,

but it is cheaper for our company to produce this pig iron at Buffalo and ship it via lake to Cleveland and thence via rail to Canton and Massillon than it would be to produce it at our furnaces in the Youngstown district and then ship by rail to Canton and Massillon. We have also, during the (830) last two years, been operating our Youngstown bar mills and rod mills at a very low rate of production, not only because of the general business depression, but also because of the transfer of bar and rod production from these mills in the Youngstown district to our lake front plants. We have transferred part of the requirements of one of our subsidiaries, the Union Drawn Steel Company, during the last two years, which has plants located at Beaver Falls, Pa., and Massillon, Ohio, from the Youngstown district where the rods and bars were produced prior to 1931, to our lake front steel plants. The requirements of this company during the past two years have amounted to approximately 60,000 tons per year. There have been other instances where steel has been produced at our lake front plants for [fol. 1359] shipment via water to our plants in other districts where formerly the steel was produced at Youngstown and shipped all-rail to such other district plants. This has also been true with respect to finished steel articles which were formerly produced in the Youngstown or Canton-Massillon districts and have in the last two years been produced at our lake front plants because of transportation costs on raw materials inbound and also on the finished products outbound. Whatever steel can be produced at our lake front plants for shipment by water is being produced at those plants.

(831) These transfers of tonnage from the interior plants located in the Youngstown district and the Canton-Massillon district to lake front plants, reduce not only the tonnage of coal handled to the Youngstown and the Canton-Massillon districts, but also other tonnage which has been handled by the rail carriers. When the steel which was formerly produced in the Youngstown and Canton-Massillon districts is transferred to our lake front plants, not only the coal tonnage to those districts is reduced, but also the tonnage of iron ore, flux stone, scrap, fluorspar and other materials entering into the production of steel, because those raw materials are handled into the lake front plants very largely,

if not entirely, by water. Rail carriers also lose the transportation, in many instances, of the outbound finished products, because they are transported by water. It takes 6 to 8 tons of raw materials to produce a ton of finished steel in [fol. 1360] the Youngstown district. The transfer of every ton of finished steel from that district to the lake front plants cuts the tonnage of the rail carriers by more than 50 per cent. For example, in connection with 15,000 tons of pig iron to which I have referred, that is being transported from the plant at Buffalo to our mills in the Canton-Massillon district, the carriers lost the movement of 30,000 tons of iron ore and 7,500 tons of flux stone.

(832) Generally speaking, fuel oil is used at the open hearth plants of the Republic Steel Corporation at Buffalo and at Chicago. In the Chicago district it is switched to our plants generally, and at Buffalo we usually receive it in boat loads, stored there at the plants.

Approximately 4 tons of coal are required to produce a ton of finished steel in the plants of the Republic Steel Corporation at Youngstown.

Referring to Mr. Boden's Exhibit 99, wherein it is shown that 5,041,973 tons of coal moved from the Pittsburgh, Freeport and Connellsville districts into Youngstown and the Mahoning Valley in 1930, of this total about 470,000 tons moved into this destination territory from the Freeport district. That coal moved to the plants of the Republic Steel Corporation. In 1929 673,852 tons moved to our plants in the Youngstown district from the Freeport district. The coal moving from the Freeport district (833) in 1929 and 1930, to which I have referred, originated at Russellton, [fol. 1361] where the Republic Steel Corporation has two mines and where it owns very large coal reserves. Russellton is located on the main line of the Bessemer & Lake Erie Railroad, 23.3 miles south of Butler, Pennsylvania and 9.8 miles north of Unity Junction, which marks the southern boundary of the Freeport coal rate group on the B. & L. E. Railroad.

The coal mined at Russellton is mined from the Freeport seam. Exhibit 90 of Mr. Sisler shows that the Pittsburgh district seam coal is located just south of Unity Junction. The Freeport rate district is shown on Mr. Boden's Exhibit 98.

Butler on the P. R. R. takes the same rates as points in the Pittsburgh group to Central Freight Association Territory, but on the B. & L. E., Butler is in the Butler-Mercer coal rate group, which is located immediately north of (834) the Freeport group. The coal in the Mercer-Butler coal rate group is produced from the Freeport seam just as it is in the Freeport rate group. The rates from the Mercer-Butler coal rate group to destinations in Northeastern Ohio are much lower than the rates from the Pittsburgh coal rate group.

I have Circular 397 of the B. & L. E. Railroad, showing a list of the coal mines on the Bessemer & Lake Erie located in the Mercer-Butler, Freeport and Pittsburgh coal-producing districts on that road, which I now wish to offer as Exhibit 130.

(Complainants' Exhibit 130, Witness Eldridge, received in evidence.)

[fol. 1362] On pages 6 and 7 is a geographical list of freight stations and coal mines on the B. & L. E. located in the Mercer-Butler, Freeport and Pittsburgh coal-producing districts. On page 7, under Index Numbers 299 and 302, are shown the mines owned and operated by the Republic Steel Corporation. It will be noted that these mines at Russellton are in the Freeport coal-producing district.

There are other so-called captive mines located in that district. Under Index 278 and 290 are shown the Francis mine (835) and Berry mine, owned and operated by the Ford Collieries Company, which is a subsidiary of the Michigan Alkali Company, whose operations are at Wyandotte, Michigan. On page 7 of this exhibit, Index 311, it will be noted that the Inland Collieries Company, of Chicago, Illinois, a subsidiary of the Inland Steel Company of Indiana Harbor, Indiana, operates the Indianola mine.

B. & L. E. Tariff I. C. C. 818 names the rates from Group 2, which is identical with the Freeport coal-producing district on the B. & L. E. to destinations on that road and the Western Allegheny Railroad. This same tariff shows the rates from Group 1, which is identical with the Mercer-Butler coal district on the B. & L. E. and from Group 3, which is identical with the Pittsburgh producing district on the B. & L. E. to the same destination territory. The tariff which names the rates to destinations on other railroads

than those which I have mentioned, is B. & L. E. I. C. C. 972. [fol. 1363] I have a statement which shows the present rate adjustment from the Freeport rate group on the B. & L. E. to destinations on that railroad and its connections, which I desire to offer as my Exhibit 131.

(Complainants' Exhibit 131, Witness Eldridge, received in evidence.)

(836) I might add on that exhibit I only picked out typical destinations. It does not nearly begin to cover the points in C. F. A. Territory that carry the same or similar rates.

The rates applying from the Freeport district mines to all destinations on the B. & L. E. north of the Freeport district are substantially lower than the rates applying from the Pittsburgh district to the same destinations. For example, Greenville and Shenango, Pennsylvania are points located in the Mahoning and Shenango Valleys destination group, otherwise known as the Youngstown district. The rate from the Pittsburgh district mines on the B. & L. E. and other railroads serving that district to Greenville and Shenango, Pa., is $1.34, which is the same as the rate from both the Freeport and Pittsburgh districts to Youngstown. The rate applying from Russellton and other mines in the Freeport district to Greenville and Shenango, Pa. is $1.13 net ton, or 21 cents under the Pittsburgh rate. The lake cargo coal rate applying from the Freeport district to Conneaut, Ohio is $1.31 net ton; the lake cargo rate applying (837) from the Pittsburgh district is $1.46 per net ton. To [fol. 1364] destinations on connecting lines, we find that to destinations on the N. Y. C. & St. L. Railroad the rates published from the Freeport group on the B. & L. E. are 10 cents less than from the Pittsburgh group to stations Oakpoint, Ohio and all other stations west thereof to Chicago. To destinations on the New York Central Railroad we find that at Ashtabula, which is north of the Youngstown destination group, the Freeport group rate is 15 cents under the Pittsburgh group rate and that at Andover, on the New York Central, just north of Youngstown, the rate is 31 cents lower from the Freeport group than from the Pittsburgh group. Other stations on the N. Y. C. between Andover and Ashtabula located in Northeastern Ohio also have lower rates from the Freeport rate group than the Pittsburgh group. This is true also to stations on the New York Cen-

tral Railroad from just west of Toledo to Chicago, including destinations in Michigan. Rate differences here range from 10 cents to 20 cents. To destinations on the Erie Railroad and Chicago & Erie Railroad from Marion, Ohio to Chicago, Illinois inclusive, the rates from the Freeport group are 10 cents under the Pittsburgh group. An Indiana Harbor, Indiana, where the Inland Steel Company, a competitor of the Republic Steel Corporation is located, the Freeport group rate is 10 cents under the Pittsburgh group rate. Wyandotte, Michigan, on the (838) New York Central, the rate is 20 cents less from the Freeport group than from the Pittsburgh group. Generally the exhibit shows that to a large part of C. F. A. Territory, the rates from [fol. 1365] the Freeport group are lower than from the Pittsburgh group.

Mr. Day: Mr. Examiner, I don't see the pertinency or relevancy of Exhibit 131 or the discussion of it by the witness. It does not seem to be related to any of the issues in this case. I object to it.

(Thereupon argument was had) (840).

Exam. Trezise: This exhibit is received. If anybody wants to make exception to it they can make exception, but it is received.

Mr. Gutheim: May I except to it, to whatever extent it is directed to any change in relationship as between the Pittsburgh district and the Freeport district into this Northeastern Ohio territory?

(841) Exam. Trezise: Certainly.

[fol. 1366] (Narrative continued:)

Oakpoint on the Nickel Plate System is just west of Lorain, Ohio.

Referring to my previous answer, I was merely going to call attention to the fact that to many of these destinations where the rates from the Freeport group mines on the B. & L. E. are lower than they are from the Pittsburgh group, the short line routes are through Youngstown.

Mr. Boden, in his Exhibit 106, shows the distance from the Freeport group as 112 miles to Youngstown. I have prepared an exhibit showing the distance via the short tariff routes from all mines listed in the B. & L. E. tariffs as being

in the Freeport No. 2 group, which I would like to offer as my exhibit 132.

(Complainants' Exhibit 132, Witness Eldridge, received in evidence.)

It will be noted that the average distance from all mines in this group to Youngstown by the short tariff routes is (842) 83.3 miles. While I have not shown the information on this exhibit, the average distance from the same mines to Greenville and Shenango, Pa., via short tariff routes is 80.9 miles. This distance is published in B. & L. E. Tariff I. C. C. 827.

I have also prepared a statement showing the distance from these mines on the B. & L. E. in the Freeport group to Youngstown by every tariff route, which I would like to offer as my Exhibit 133.

(Complainants' Exhibit 133, Witness Eldridge, received in evidence.)

[fol. 1367] Referring to page 3 of Mr. Kern's Exhibit 39, the average distance from the eight active mines—six located on the B. & L. E. in the Freeport district and two on the Unity Railway in that district—is 82.5 miles, figured by the route of the B. & L. E. to Butler and thence B. & O. to Youngstown. This is also the short tariff route from the 19 origin points, to which I have just referred, shown in Mr. Kern's Exhibit 38, to Youngstown.

(843) The coal properties of the Republic Steel Corporation in the Freeport district are located approximately four miles from the Allegheny River. Coal mines adjacent to and adjoining our Russellton coal properties now load coal to barges on the Allegheny River and transport it in such barges to steel mills on the Ohio River. Our management has given consideration to securing an outlet to the Allegheny River, and such an outlet can be secured so that the Russellton coal can move by river to a river transfer point for movement by rail to our plants in the Youngstown district. The water haul from the point on the Allegheny River adjacent to the Republic coal properties is less than 40 miles to the present river transfer point at Conway and Colona, as compared with the distance by water from points in the Connellsville district from which ex-river coal is moving to these transfer points of approximately

100 miles to Conway and Colona. The river movement from points in the (844) Connellsville District is through seven locks and from the section of the Allegheny River adjacent to the Russellton coal properties, it is through five locks.

[fol. 1368] We have given very serious consideration to such a method of transporting the coal after having many conferences with the carriers, seeking a reduction in the all-rail rate from the Freeport group to Youngstown. It is our position that coal must move at a lower transportation cost than it is now moving. The coal reserves in our properties at Russellton amount to some 20,000,000 tons and the freight bill to move this coal over a period of years on the present rail rate basis will amount to approximately $30,000,000.00. From coal properties located so near Youngstown as these Russellton coal properties, we feel that the movement therefrom should be via an all-rail route, but as I pointed out, we must reduce our operating costs at our Youngstown district mills if our industry is to survive in that district, and in view of the fact that our present rail transportation costs on coal from the Freeport district forms such a large part of our total operating costs in producing steel, we must seek a medium of transportation that will reduce that cost, and if it cannot be secured (845) by the all-rail route, it must be secured by some other route. Practically all of this coal from Russellton has been delivered in the Youngstown district by the B. & O. Railroad since the mine was purchased by our company in 1918, and the Russellton coal delivered by the B. & O. has amounted to approximately 50 per cent or more of the total coal deliveries of the B. & O. in Youngstown.

[fol. 1369] Mr. Gutheim: I object to any showing on the reasonableness of the rate alone.

Mr. Burgess: We are not asking that Russellton be separated from the group.

Exam. Trezise: Any objection to it on his understanding that he is not asking that special reduction be made as to Russellton?

Mr. Gutheim: My previous objection stands, that there is no issue raised in the Western Pennsylvania Coal Traffic

Bureau complaint with relation to the relationship between Freeport and the other Western Pennsylvania districts.

Exam. Trezise: We will receive his testimony because it relates to interstate rates.

(Narrative continued:)

My next exhibit 134, is a statement showing short line distances, routes over which mileage is figured, and the present rates on coal applying from various Illinois coal groups to East St. Louis, Illinois.

Mr. Day: Mr. Examiner, I object to Exhibit 134 and also to the witness's testimony respecting these selected Illinois rates on the ground that Illinois intrastate rates are not relevant, competent or material to the issues in this case.

(847-850) (Argument had.)

(Complainants' Exhibit 134, Witness Eldridge, received in evidence.)

[fol. 1370] The rates from Groups 5, 8, 9, 10, 12, 13, 15 and 16 were prescribed by the Commission in Docket 18183, Intrastate Rates on Coal to East St. Louis, Illinois, reported in 142 I. C. C. 95 and 161 I. C. C. 371. On page 101 of the Commission's first decision in this case, it is shown that the consumption of coal in the East St. Louis coal district during 1925 was approximately 2,938,000 tons, or less than one-half the coal received in Youngstown.

It is also indicated in the decision that manufacturers of iron and steel are consumers of great quantities of (851) coal in the East St. Louis district. The iron and steel producers in the Youngstown district are in keen competition with producers of iron and steel products located in the East St. Louis, Illinois district.

My next exhibit, 135, is a statement showing short line distances, routes, and present rates applying on coal from the Brazil, Linton and Clinton districts to Indianapolis, Indiana. These coal districts are the nearest coal districts to Indianapolis. The rate in effect from these districts to Indianapolis is $1.13 per net ton. Among the carriers publishing the rate are the Pennsylvania Railroad, the Baltimore & Ohio Railroad, and the New York Central Railroad. The rate is published for an average short line distance of 84.5 miles, computed via the shortest routes

via which traffic can be handled without transfer of lading, and not via the short tariff routes.

(Complainants' Exhibit 135, Witness Eldridge, received in evidence.)

[fol. 1371] My next Exhibit, 136, is a statement showing the present rates applying on bituminous coal from points in the Fairmont District in West Virginia to Wheeling, West Virginia. The rate is $1.13 per net ton, published by the Baltimore & Ohio Railroad. It applies from a great (852) number of mines. The average distance is 88.4 miles. The plants of the Republic Steel Corporation located in Canton, Massillon and the Youngstown district compete with iron and steel producers located in the Wheeling, West Virginia district. Under this rate the Wheeling iron and steel manufacturers can secure coking and gas coal at lower cost than the iron and steel producers located in the Youngstown district, or at Canton and Massillon.

(Complainants' Exhibit 136, Witness Eldridge, received in evidence.)

The rate published by the B. & O. from the mines in Jackson County to Portsmouth, Ohio, is $1.01 per net ton. This rate applies from mines in the vicinity of Athens and the average distance from these mines to Portsmouth is 84.2 miles. The tariff reference for the rate is F. V. Davis' I. C. C. 48 and for the distance B. & O. I. C. C. 22070.

In connection with that rate I desire to say that at Portsmouth, Ohio the Republic Steel Corporation has a very important competitor, namely, the Wheeling Steel Corporation.

In connection with the $1.34 rate on coal from the Freeport group to Youngstown, (853) I want to point out that the rate on amesite, which is crushed stone coated with [fol. 1372] tar and asphaltum, from Youngstown to destinations in the Freeport group, including Russellton, is $1.13 net ton. Amesite loads in open top equipment with an average loading of about 50 tons and the value at point of origin ranges from about $3.50 to $7.00 a ton, which is a much higher value than that of the Freeport coal at origin point.

I have prepared another statement showing the rates prescribed or approved by the Interstate Commerce Commis-

sion from groups in Illinois to destinations in Illinois and Iowa, which I now desire to offer as my Exhibit 137.

Mr. Day: Mr. Examiner, if you will indulge me I would like to object to this exhibit to the extent that it shows rates to Iowa points from Illinois, on the ground that these rates are incompetent, immaterial and irrelevant and beyond the scope of the issues in this case.

Exam. Trezise: Very well, you may have your exception.

(Complainants' Exhibit 137, Witness Eldridge, received in evidence.)

(Narrative continued.)

(854) The Republic Steel Corporation has a plant at Moline, Illinois. We receive coal at Moline from the Illinois origins. The quantity is exceedingly small as compared with the volume of coal moving to our plants at Youngstown. As a matter of fact, the movement to Moline, East Moline and Rock Island, Illinois combined, for all consumers, ranges from 300,000 to 400,000 tons per year. That information is shown in the Commission's decision [fol. 1373] in I. C. C. 182, page 537.

I have prepared a statement showing the average loading of coal for the year 1930 in the various regions, including the Great Lakes, Central Eastern, Southern and other regions, and wish to offer it as Exhibit 138.

(Complainants' Exhibit 138, Witness Eldridge, received in evidence.)

I have shown the average loading and also have listed the principal lines originating coal in the several regions.

(855) The character of equipment owned by the principal coal originating carriers operating in the Central Eastern and Great Lakes Regions is one of the causes for the heavier loading in those regions. The authority for that exhibit is I. C. C. Commodity Statistics 32100.

72,442 coal cars of capacity of 140,000 pounds or greater are owned by the Pennsylvania Railroad, the Baltimore & Ohio Railroad, the New York Central Railroad, the Bessemer & Lake Erie Railroad, the Pittsburgh & Lake Erie Railroad, the Wheeling & Lake Erie Railway and the Montour Railroad. Only 6950 cars of 140,000 pounds or greater capacity are owned by the principal coal originat-

ing roads in the Illinois-Indiana fields. The Illinois Central has 1,050; Missouri Pacific, 1,500; C. M. St. P. & P., 1,000; C. R. I. & P., 2,000; Santa Fe, 900, and the C. & E. I. 500. The rest of the principal originating roads in the Illinois-Indiana coal fields have no cars of 140,000 pounds or greater capacity. These figures can be verified by reference to the Official Equipment Register.

[fol. 1374] On the coal moving to the plants of the Republic Steel (856) Corporation at Moline, Illinois, we checked the average loading up over a period of several years on about 350 cars, the average loading was 52 tons. I might also add in connection with that last question, Mr. Burgess, that in the Indiana-Illinois cases, 128 I. C. C., the Commission indicated that the carriers paid a maximum switching charge of $25 per car in delivering coal to Chicago industries. The switching rate is 50 cents a ton. That would indicate that the maximum loading of coal into Chicago would be 50 tons per car.

I was the witness for the Republic Steel Corporation, the complainant, in Docket 7252, before the Ohio Public Utilities Commission. The Republic Steel Corporation has steel plants at Canton and Massillon, consisting of the following units: at Canton, 62 coke ovens, one blast (857) furnace, 14 open hearth furnaces, 6 electric furnaces, also blooming mills and rolling mills. At Massillon, 49 coke ovens, one blast furnace, 9 open hearth furnaces, also blooming and rolling mills.

At these plants at Canton and Massillon, the Republic Steel Corporation is the largest consumer of coal which is transported to those two destinations. It uses metallurgical coal and steam coal. The coking coal, in view of the large number of coke ovens at both points, represents by far the largest volume of metallurgical coal used. This coking coal is both high volatile and low volatile coking coal. The high volatile coking coal comes from the Con-
[fol. 1375] nellsville district. The low volatile coal comes from the low volatile West Virginia districts.

In the year 1928, which may be considered a normal year in steel operations, the plants of the Republic Steel Corporation at Canton and Massillon received 53.5 percent of the coal shipped into Canton and Massillon from Ohio coal producing groups. In that same year, however, the plants of the Republic Steel Corporation at Canton and Massillon

received 93.45 percent of the total coal shipped to Canton and Massillon from the Inner and Outer Crescent districts.

Mr. Kern, in his testimony referring to his Exhibits 47 and 48, indicated that the shipments of coal from the Ohio groups to the destinations shown on those two exhibits (858) had relatively held their own as compared with shipments from the Inner and Outer Crescents, and as a matter of fact that the decline, if any, in the tonnages shipped from the Ohio coal producing groups to such destinations, was a great deal less than the reductions in the tonnage from the Inner and Outer Crescents to those same destinations.

Dealing with Canton and Massillon, the reason for the greater relative reduction in the coal tonnage from the Inner and Outer Crescents as compared with the Ohio groups is entirely due to the fact that the coke ovens and blast furnaces at the Canton and Massillon plants of the [fol. 1376] Republic Steel Corporation are not operating to the capacity that they did in 1928, nor are they operating relatively to as high a capacity as the rolling mills at those plants. At the rolling mills the only coal used is steam coal.

This situation accounts for the greater relative drop in metallurgical coal from the Inner and Outer Crescents than in the steam coal consumed at Canton and Massillon, which moves from Ohio mines. For example, in the year 1931, as compared with 1928, Mr. Kern's exhibit shows that to Canton and Massillon combined, the coal tonnage from the Crescent districts fell off 582,005 tons, but the coal from the Inner and Outer Crescents to the Republic Steel (859) Corporation plants at Canton and Massillon in 1931 was 614,949 tons less than in 1928.

Mr. L. E. Woods, president of the Crystal Block Coal and Coke Company, testified in this proceeding on Saturday, December 17, that the shipments from the Thacker District to five destinations in Northeastern Ohio, comprising Akron, Cleveland, Canton, Lorain and Massillon, amounted in 1929 to 275,156 tons, in 1930 to 166,858 tons, and in 1931 to 55,015 tons. He attributed this entire decrease in tonnage from the Thacker District to the fact that Ohio coal had displaced tonnage from the Thacker district. To the five destinations named, Exhibit 125 from which Mr. Woods obtained his figures, shows the tonnage [fol. 1377] from the Thacker district fell off in 1931, as com-

pared with 1929, 220,141 tons. Of this decrease in tonnage, the falling off in tonnage at Canton and Massillon is responsible for 153,965 tons. The Republic Steel Corporation plants at Canton and Massillon in 1931 consumed 130,963 less tons of coal from the Thacker district than they did in 1929. The balance of that coal was domestic coal moving into Canton, which is considered a premium coal. (860) We have had that checked up by a representative at Canton, and it sold at $7.50 per ton. In 1931 it sold for from $5.75 to $6.25. It is selling today, that is, the retail price, for $5.75 to $6.50, depending upon the size. That is one price for block and another price for lump.

Referring to the figures shown on Exhibit 125 from the low volatile districts of New River, Tug River, Pocahontas and Winding Gulf—the total consumption at Canton in 1929 was 71,403 tons and in 1931 27,750 tons. Consumption of the Republic Steel Corporation's plants at Canton in 1929 of this coal was 69,119 tons, and in 1931, 26,358 tons. To Massillon in 1929 the total shipments of this coal as shown by Exhibit 125 were 78,477 tons, and in 1931, 12,448 tons. The consumption of the Republic Steel Corporation's plants at Massillon in 1929 of this coal was 76,124 tons, and in 1931 11,674 tons.

As further indicating how the operations of the Canton (861) and Massillon coke ovens of the Republic Steel Cor- [fol. 1378] poration affect the coal tonnage from the Inner and Outer Crescents to Canton and Massillon, I might point out that, since about the middle of this present year the coke ovens at Canton have been cold and the 49 coke ovens at Massillon have not been operating, but have been kept warm with natural gas. For practically all of this year the blast furnaces at Canton and Massillon have not been in operation.

The coal received by the Canton and Massillon plants of the Republic Steel Corporation is delivered direct to the plants by the road-haul carriers without the necessity of absorbing reciprocal switching charges of connecting lines. I make this statement because of Exhibit 76 introduced by Mr. Kern, showing the number of deliveries at various destinations in Northeastern Ohio, including Canton and Massillon. The three delivering roads at Canton and Massillon are the B. & O. R. R., the P. R. R. and the W. & L. E. Railway, as indicated by this Exhibit 76.

I propose now to deal with the carriers' exhibits in which they have shown the average distance from all origins named in Davis' Coal Tariff #48, in the Ohio #8 and Middle-Coshocton Districts to Canton and Massillon. These exhibits are Mr. Kern's Exhibits 33 and 34. Exhibit 33 of Mr. Kern, on page 13, shows that the average distance by all (862) tariff routes from origins in the Ohio #8 district to Canton is 90.1 miles. This same information [fol. 1379] is carried into his Exhibit 34, on page 2. Excluding the routes over which there is now published the same paper rate that was published prior to the order of the Ohio Commission in Docket 7252 of $1.51, then Exhibit 33 of Mr. Kern shows that the average distance via all tariff routes over which the rate of $1.08 applies, prescribed by the Ohio Commission, is 87.1 miles. Twenty-six of the origin points, as shown on page 13 of Mr. Kern's Exhibit 33, are located in the St. Clairsville #8 district on the B. & O. Railroad and 39 in the Wheeling Creek district on that railroad. The average distance from the 26 points located in the St. Clairesville #8 district is shown as 154.2 miles over the B. & O. direct, and from the 39 origins in the Wheeling Creek district as 121.3 miles. The only single line route of the B. & O. from the origin points on its line in the St. Clairesville and Wheeling Creek districts (sub-districts of No. 8), is via Dover and Valley Junction, Ohio, as was stated by Mr. Webber, counsel for that road, at the hearing in this proceeding on Wednesday, December 14th. The route used on page 13 of Mr. Kern's Exhibit 33 is via Warwick and East Akron and is 46.2 miles longer than the only single line tariff route of the B. & O. to Canton, applying, as I have stated, via Dover and Valley Junction. Of (863) course the errors as reflected in his distances are also reflected in his earnings shown in connection with his exhibits.

[fol. 1380] I have prepared Exhibit 139, which I would now like to offer. It is a two-sheet exhibit entitled "Statement Showing Average Distance via All Tariff Routes and Average Distance via Short Tariff Routes on Coal from Ohio No. 8 District to Canton, Ohio." The second sheet is entitled the same, except it says "from Ohio No. 8 District to Canton and Massillon, Ohio."

(Complainants' Exhibit 139, Witness Eldridge, received in evidence.)

It will be noted that, after the corrections are made, the average distance via all tariff routes from the 318 origin points in the Ohio #8 District to Canton is 80.7 miles, and from the 285 origin points via routes over which the rate of $1.08, prescribed by the Ohio Commission, is in effect, the average distance is 76.5 miles. Via the short tariff routes, the average dis(864)tance is 76.3 miles to Canton.

Combining Canton and Massillon as destination points, the average distance over all routes, including those carrying paper rate of $1.51, is 79.1 miles, and via all tariff routes over which the prescribed rate of $1.08 applies, is 76.2 miles, and via the short tariff routes, over which the rate of $1.08 is in effect, 77.3 miles.

I have also corrected the average distance from the active mines in the Ohio #8 District to Canton, as shown in Mr. Kern's Exhibits 35, pages 3 and 4; Exhibit 36, page 12, and Exhibit 37, page 2.

[fol. 1381] In Mr. Kern's Exhibit 36 on page 12, the average distance to Canton via all tariff routes, including those over which the paper rate of $1.51 is in effect, is shown as 83.4 miles, and including all tariff routes over which the rate of $1.08, prescribed by the Ohio Commission, is in effect, the average distance is shown as 79.8 miles to Canton.

On page 2 of Mr. Kern's Exhibit 37 there has been carried over from page 12 of Exhibit 36, the average distance of 83.4 miles to Canton.

I would now like to offer as my Exhibit 140 a statement correcting the average distance to Canton from the active mines using the only tariff route applying via the single line of the B. & O. from the St. Clairsville and Wheel(865)ing Creek districts in the Ohio #8 group.

(Complainants' Exhibit 140, Witness Eldridge, received in evidence.)

The average distance as corrected is 77.1 miles via all tariff routes and 72.9 miles via all tariff routes over which the $1.08 rate is in effect, and the average distance to Canton and Massillon combined via all routes over which the rate of $1.08 from these active mines is in effect is 73.8 miles.

It will be noted that the average distance from active mines in the Ohio #8 District to Canton and Massillon by all tariff routes over which the rate of $1.08 is in effect is 1.7 [fol. 1382] miles less than the distance from the Ohio #8

District to Canton and Massillon, as computed by the Ohio Commission in its decision in Docket 7252 and shown on page 18 thereof as 75.5 miles. This decision is Exhibit 1 in this case.

This difference in the average distance from the active mines in the Ohio #8 District to Canton and Massillon, as shown in the decision of the Ohio Commission and in my Exhibit 140, is due to the fact that the list of active mines as shown in the Carriers' Exhibit 40 in Docket 7252 before the Ohio Commission, differs from the list of active mines shown in Mr. Kern's Exhibit 35. The active (866) mines listed in Exhibit 40 in Docket 7252 covered those mines that shipped any coal by railroad during the period January 1st, 1929 to March 31, 1930 inclusive, whereas the active mines listed in Exhibit 35 in these proceedings covers the mines that shipped any coal by railroad during the period July 1, 1931 to September 15, 1932 inclusive.

It has not been possible for me, since Exhibit 33 was introduced in these proceedings, to check all of the origin points listed on the various railroads in the Middle District and the routes from those origin points and the distances thereover to Canton and Massillon. From such examination as I have been able to make of page 15 of Exhibit 33 showing the number of origin points, the various routes and the average distance thereover to Canton, and page 16 showing the same [fol. 1383] information from origin points in the Middle District to Massillon, I have found that to Canton, Ohio, only one route is used in computing the average distance from the 23 origin points located on the C. L. & W. Division of the B. & O. That route being by the B. & O. to Justus, thence via W. & L. E. The B. & O. has a route direct from these 23 origin points to Canton via Dover and Valley Junction, and this route is shorter than the joint line route via Justus and W. & L. E.

I also find that only 43 origin points are shown as being (867) located on the W. & L. E., whereas the tariff shows that there are 49 origin points on the W. & L. E. taking the 80-cent rate to Canton. The shortest tariff route shown on page 15 from the 43 origin points listed as being on the W. & L. E. is via W. & L. E. direct, the average distance via this route being shown as 36.6 miles. From 35 of the 49 origin points actually shown in the tariff, the W. & L. E. is the short line tariff route to Canton, but

from 14 of the origin points shown in the tariff, the short line tariff route to Canton is W. & L. E. to Valley Junction and thence B. & O.

It will be noted that Exhibit 33, page 15, shows two routes from the total number of 43 origin points listed on the W. & L. E., indicating that the joint route of the W. & L. E. via Valley Junction and B. & O. is 9.5 miles longer on the average than the route via W. & L. E. direct. Separating the short tariff routes, as I have done, from the actual number of points of 49 shown in the tariff, it will be [fol. 1384] found, as I have stated, that from 35 of them the short tariff route is via W. & L. E. direct and from the balance of 14, via the joint line route of the W. & L. E.-Valley Junction-B. & O.

There are 37 origin points listed in Davis' Tariff 48 on the P. R. R. taking the 80-cent rate to Canton. Page 15 of Exhibit 33 lists 46 origin points on the P. R. R. One of these origin points takes a rate of 76 cents. From eight of the origin points there are two tariff routes to Canton (868), one route via P. R. R. direct and the other route via P. R. R. to Valley Junction and thence via B. & O. From the eight origin points referred to, the joint route of the P. R. R. via Valley Junction and B. & O. is the shorter. There are 20 other origin points listed as being in the Middle District on the P. R. R., and 9 listed as being in the Coshocton District on the P. R. R. From these 29 points located on the P. R. R., there is no tariff route published except via the single line route of the P. R. R., and this route from many of the origins to Canton is exceedingly circuitous. For example: from Mineral City the P. R. R. single line distance is 39 miles; the distance via P. R. R. to Valley Junction—B. & O. is 19 miles; from New Philadelphia the P. R. R. single line distance is 52 miles and the route via Valley Junction and the B. & O. is 28 miles. From Roswell the P. R. R. single line distance is 58 miles and the distance via Valley Junction and B. & O. is 34 miles.

[fol. 1385] From all nine points in the Coshocton District the line of the P. R. R. is exceedingly circuitous. Typical examples of this circuity are the following: from Philadelphia Road the P. R. R. single line distance is 91 miles; the distance via Urichsville and the B. & O. is 43½ miles. From Dennison, the P. R. R. single line distance is 86

miles, and the distance via Urichsville and the B. & O. is 38½ miles. From Conesville, the P. R. R. single line distance is 90 miles and the distance via Coshocton and W. & L. E. is 61 miles. These three points which I have referred to are the only three points in the Coshocton District at which active mines are located, according (869) to page 26 of Mr. Kern's Exhibit 35.

On page 17 of Exhibit 33, the average distance from points in the Middle District to Massillon, Ohio is shown over various routes. Forty-six origin points are listed as being located on the W. & L. E. The tariff lists 51 origin points on the W. & L. E. taking the 80-cent rate to Massillon. From 43 of these origin points the short line tariff route is via W. & L. E. direct, and from eight of them via W. & L. E.—Canton, Ohio and P. R. R.

On this same page, 39 origin points are shown as being located on the P. R. R. From all but two, the only route shown is via P. R. R. direct. From two of the origin points the joint line route via P. R. R.-Valley Junction—W. & L. E. is shown. There are 38 origin points listed in the tariff, 29 of them being located in the Middle District on the P. R. R. and 9 in the Coshocton District. From three [fol. 1386] of these origin points in the Middle District, the short line route is via P. R. R.—Valley Junction—W. & L. E. From the other 26 origin points on the P. R. R., the only tariff route is via the single line route of the P. R. R., which is, in some instances, exceedingly circuitous. For example: The P. R. R. single line distance from Mineral City to Massillon is 48 miles. The distance via Valley Junction—W. & L. E. is 23 miles. From Joyce the P. R. R. single line distance is 73 miles, and the distance via Dover—B. & O. is 26.6 miles. From Wolf, the (870) P. R. R. single line distance is 73 miles, and the distance via Dover—B. & O. is 37.6 miles. From New Comerstown, the P. R. R. single line distance is 77 miles and the distance via Dover—B. & O. is 41.6 miles. From Post Boy, the P. R. R. single line distance is 80 miles and the distance via Valley Junction and B. & O. is 45.6 miles. From Kimbolton the distance is 92 miles and the distance via Dover and the B. & O. is 57.6 miles.

In this connection I wish to point out that the P. R. R. publishes joint rates via the short line route from Joyce, Wolf, New Comerstown, Post Boy and Kimbolton to Can-

ton, but to Massillon, where their single line route is even more circuitous, they do not publish any joint rates.

The distance via the single line route of the P. R. R. from all nine origin points in the Coshocton District is even more circuitous to Massillon than it is to Canton. For example, the P. R. R. single line distance from Philadelphia Road [fol. 1387] is 99 miles and the distance via Urichsville—B. & O. is 40.3 miles. From Dennison the P. R. R. single line distance is 94 miles and the distance via Urichsville—B. & O. is 35.3 miles. From Conesville the P. R. R. single line distance is 98 miles and the distance via Coshocton and W. & L. E. is 54 miles.

Referring to pages 23 and 24 of Exhibit 35 of Mr. Kern, showing the average distance from active mines, it is to (871) be noted that from the six active mines on the B. & O. located on the C. L. & W. Division, a route is shown to Canton via Warwick, Ohio. The average distance as shown via this route, which is not a tariff route, is 83.6 miles, which is 46.2 miles longer than the single line tariff route of the B. & O. applying via Dover and Valley Junction.

On page 25 of this same exhibit, there are listed five active mines located at New Philadelphia on the P. R. R. in the Middle District, and the average distance to Canton is shown as 52 miles and to Massillon as 60 miles. I pointed out that the distance via the single line route of the P. R. R. from New Philadelphia to Canton is exceedingly circuitous.

It will be noted on page 26 of the exhibit that the carriers have shown a joint line route from these five active mines at New Philadelphia to Canton via Valley Junction —B. & O. with an average distance of 28 miles. I have already referred to the exceedingly circuitous single line [fol. 1388] route of the P. R. R. from the origin points in the Coshocton District. Such points at which active mines are located are shown on page 26 of Exhibit 35.

Regardless of whether the distances be computed from all origin points or from active mines, as they were computed by the Ohio Commission based on Defendants' Exhibit 40 in Docket 7252, if there be substituted for the unduly circuitous single line route of the P. R. R. from the mines on that (872) road in the Middle District and in the Coshocton District, to which I have referred, reasonably direct routes, the average distance via short tariff routes to Canton and

Massillon will be well under 40 miles, as found by the Ohio Commission.

On page 15 of Exhibit 33, forty origin points are shown as being located in the Massillon District, 28 of them taking an 80-cent rate to Canton. As a matter of fact, there is only one active mine located in the Massillon District and this has been the situation for many years. This mine is Massillon City #8, which is shown on page 29 of Mr. Kern's Exhibit 35. On page 29 of Exhibit 35, the distance from Massillon City #8 mine to Canton is shown as 18 miles and to Massillon as 11 miles. The tariff distance as shown in W. & L. E. Tariff I. C. C. 1713 is 17 miles to Canton and 10 miles to Massillon. The carriers, in Docket 7252 before the Ohio Commission showed the distance from this mine to Canton as 16 miles in their Exhibit 41 and as 9 miles to Massillon in their Exhibit 42.

[fol. 1389] Attention is called also to Exhibit 4 in this proceeding, petition of the B. & O. R. R. Company, the P. R. R. and P. & W. V. Railway Company to the Public Utilities Commission of Ohio, for permission to publish on one day's notice, rates on bituminous coal from their mines and stations in the Ohio #8, Middle Coshocton, and Massillon Districts to Akron (873), Cleveland, etc. It is stated on page 2 of that petition: "In reference to the Massillon district, you will note that no rates appear on the attached Exhibit 'A', as applicable from that origin field. This is due to the fact that the B. & O. and P. R. R., which are the only roads other than the W. & L. E. in the Massillon District, serve no active mines, and consequently saw no necessity of meeting the rates of the W. & L. E."

Mr. Boden's Exhibit 98 shows the Massillon District. This may indicate the Massillon District from a tariff standpoint, but it certainly does not indicate the Massillon District from a coal-producing standpoint, as there is no such thing as the Massillon District as a coal-producing district, there being only one active mine in that district.

The rate from the Massillon City #8 mine to Canton was $1.01 and to Massillon 64 cents prior to August 1, 1932, the effective date of the W. & L. E. Tariff publishing the 72-cent rate to Canton and the rate of 60 cents to Massillon, prescribed by the Ohio Commission in Docket 7252. Page 2 [fol. 1390] of Mr. Kern's Exhibit 64 is in error in showing the reductions to Canton as 21 cents and to Massillon as

41 cents. The reductions to Canton were 29 cents and to Massillon but 4 cents. He has used a $1.01 rate from the so-called Massillon District as in effect to both Canton (874) and Massillon, whereas it was only in effect to Canton, the rate to Massillon having been 64 cents.

Referring to Mr. Kern's Exhibit 14, which is a map that purports to outline, as I understand it, the application of the rate of $1.08 from the Ohio #8 District to the group designated as the Canton group, this map would indicate that the rate prescribed by the Public Utilities Commission of Ohio in Docket 7252, applied to a large destination group, which includes a large area north of Canton and Massillon. As a matter of fact, the $1.08 rate has not been published north of the line of the P. R. R. extending from Massillon through Canton to Alliance, although the map would indicate that it had been. So far as the order of the Ohio Commission in Docket 7252 is concerned, there was no requirement that the rate should be published to Alliance and it was not so published until August 30, 1932, under a special permission order of the Ohio Commission.

What I have just said with reference to the Canton destination group on Exhibit 14 also applies to the Canton destination group as shown on Exhibit 16 in connection [fol. 1391] with the application of the 80-cent rate from the Middle Coshocton District to Canton and Massillon.

On Witness Kern's Exhibit 23, a historical statement of the bituminous coal rates from Ohio #8, Pittsburgh (875), Connellsville and Fairmont Districts to Canton and Massillon, it is shown that when the former rate of $1.26 applied from the Ohio #8 District to Canton and Massillon, the difference under the Pittsburgh rate was 33 cents. The present difference of Ohio #8 rate under the Pittsburgh District rate is 51 cents. The present Pittsburgh rate is a result of the Interstate Commerce Commission's decision in the Canton Chamber of Commerce case, 56 I. C. C. 293. The rates from the Pittsburgh District to Canton were substantially reduced as the result of the decision in that case. However, no adjustment was ever made in the rates from the Ohio #8 District to Canton and Massillon until they were adjusted as a result of the Ohio Commission's decision in Docket 7252. As stated before, the present difference of Ohio #8 under Pittsburgh is 51 cents. It will be noted on Exhibit 23 that the difference in the rates

effective June 25, 1918 from Ohio #8 under Pittsburgh was 40 cents. If this same difference had been maintained, taking into consideration the general 40 percent advance and the general 10 percent reduction, the Ohio #8 rates would be 50 cents under the Pittsburgh rates to Canton and Massillon.

[fol. 1392] (876) On Boden's Exhibit 100 there are certain traffic density figures shown, but none shown for the State of Illinois separately. I have those figures, taken from the same traffic density statistical report, 28105. The figures are, Illinois, revenue ton miles per mile of road, 2,587,924, and net per mile of main track, 1,959,243.

Mr. Burgess: Mr. Examiner, that concludes our case on direct with one exception. We haven't had an opportunity to compute the average distance via the short line tariff routes, Pittsburgh and Connellsville Districts to Youngstown, Canton and Massillon, and we would like to reserve the right to put in exhibits showing that information at the Washington hearing.

Cross-examination.

By Mr. Orcutt:

On the greater portion of our coal tonnage to Youngstown we pay the Connellsville rate. (877) I believe on the greater portion the rate we pay to Youngstown would be $1.42 net ton without the surcharge. We do not use that same coal at our plant at Buffalo. We use but very little coal at Buffalo. We don't use any coal there except a very few cars that move out from the Reynoldsville District, principally. I don't recall what that rate is to Buffalo. The transportation cost of the coal received by the Republic Steel Corporation at Buffalo is negligible. It is not true that the transportation cost on coal was not the primary factor that induced us to transfer tonnage from our Youngstown to our Buffalo plant. Coal and iron ore are the principal commodities entering into the manufacture [fol. 1393] of iron and steel and (878) form a very large part of your operating costs, and as our cost at Buffalo for producing steel is very much lower than at Youngstown, necessarily the coal cost into Youngstown is a very important factor. As I stated before, I don't recall the rate on the coal to Buffalo. All the coal we get in at Buf-

falo is just a little bit of steam coal. I stated the transportation costs of raw material into Youngstown, of which coal is one of the most important ones, is a factor. Iron ore is another one. (879) It is rather difficult to compare our cost per ton of coal laid down at Youngstown versus such cost at Buffalo, because we don't use at our plant at Buffalo high and low volatile coal. We buy the coke, and of course the transportation charges on the coal that went into making that coke by another company would be a factor in the price of the coke. At Buffalo we buy the coke from the Donner-Hanna Coke Corporation of Buffalo.

We also have plants at Cleveland and Chicago. At Cleveland we have a somewhat similar situation. We don't have any coke ovens. We have a blast furnace there that has not been operating for some time. (880) We use some Ohio steam coal at Cleveland, and when the plant is operating we use some gas coal. Our rates on both gas and steam coal are higher to Youngstown than they are to Canton and Massillon, either one.

[fol. 1394] The Buffalo plant was acquired through the merger of the Republic Steel Corporation in the early months of 1930. The Youngstown plant was a part of that merger at the same time. Prior to that merger the operation at Youngstown was the Republic Steel Corporation's largest operation. It was the Republic Iron and Steel Company, the parent company, and main plant. (881) In the merger the name was changed to the Republic Steel Corporation. At the time of that name change we acquired the Buffalo plant. Prior to 1932 the name of the Buffalo plant was the Donner Steel Company. At the time the name of the Republic Steel Corporation was changed and the plant at Buffalo was acquired, the coal rate adjustment as it existed prior to August 1, 1932 was in effect.

We buy our coke at Buffalo of the Donner-Hanna Coke Company. The Republic Steel Corporation has a half interest in that concern. It is a separate company, however, and serves other steel interests.

(882) As to why I said that we must have reduced rates on coal if the plant in the Youngstown district is to survive, having in mind the rates to our Cleveland plant on the coal we use there is more than it is to Youngstown, I would

say that is as far as coal is concerned, but remember you can't just take coal to determine the cost of making steel, it is coal, iron ore and flux stone. Coal is one of the raw materials, iron is another one. We haven't taken the position that the Commission should reduce rates on coal be- [fol. 1395] cause our rates on iron ore are a certain amount. All we are asking for is that the rates from the Freeport, Pittsburgh and Connellsville Districts to the Youngstown, Canton and Massillon Districts be placed on a reasonable level. We are not basing that on the cost of assembling a finished ton of steel. We merely pointed out how the costs of raw materials, especially coal into Youngstown, was causing the carriers to lose a lot of tonnage. The carriers are perhaps one of the big losers in this, because whenever (883) they lose coal they lose iron ore and flux stone, and I cited these specific examples of how we transfer tonnage to other plants to indicate the necessity, not only from our own standpoint but from the standpoint of the carriers of having reasonable rates into the Youngstown District.

As to why I say we must have reduced rates into Youngstown if the plant there is to survive, it is for this reason: Our Youngstown and Canton plants are perhaps the largest part of the Republic Steel Corporation. We make many articles of iron and steel in these districts that we don't make in other districts, and we haven't transferred any certain operations to other districts as yet. I can't say as to there being any thought of abandoning the Cleveland plant. Our rate on coal is more to Cleveland that it is to Youngstown, but we don't have any rate on iron ore to pay. (884) It is not a question at all that we think the rate on coal to Youngstown must be reduced because we have to pay a rate on iron ore ex-lake into Youngstown. I was [fol. 1396] merely pointing out, as I said before, how it is costing the carriers tonnage, and you have put in elaborate figures here to show the loss of the coal tonnage, and I was showing you why you were losing it.

In Exhibit 131 I have arranged various rates under groups, bearing the heading of certain railroads. As to which of those groups of rates are part of the rate adjustment here under consideration from Ohio origins to Northeastern Ohio and from Pennsylvania and West Virginia origins to Northeastern Ohio, there is in the first block,

Conneaut, Ohio, and it is a local point on the B. & L. E. Railroad. (885) The rate from the Freeport District to Conneaut, Ohio, is brought into this proceeding on the complaint of the Western Pennsylvania Coal Operators. They draw a line at Sandusky and south, takes in the whole state east of that. In the next group, our A. & A. Railroad, I would say those rates are over in the direction of the Rochester group rates. It is correct that the Rochester group adjustment is not involved in this proceeding. In the next group of rates to B. & O. Railroad points, the first five rates are rates to points intermediate to Chicago, and the next five rates are rates in the Buffalo-Rochester adjustment. Neither one of those rate adjustments are involved in this proceeding. As to the C. & N. W. Railway rates, (886) I don't know as I can say just what the adjustment is out there. I just merely put the rates on the exhibit as they exist today. I wouldn't know that the Burlington, Chicago, Great Western, C. M. St. P. & P. rates are part of the same adjustment and Commission-made rates over Chicago. I haven't investigated to see how they [fol. 1397] happened to get that amount. I do not know whether or not on all these rates the same differential obtains as at Chicago. I haven't looked into that feature of it. The exhibit shows the rates as they are published.

As to the group at the bottom of the first page, D. L. & W. Railroad, the $4.14 per ton figure, that looks like an error there, I will correct it right now. It is a typographical error. All the rates there should be $2.14 under the Freeport District and $2.24 under the Pittsburgh District, the difference remaining the same.

I am not acquainted with the fact that the Commission fixed a certain rate from the Freeport group to Chicago. (887) I haven't any knowledge of the Wyandotte rate being set by the Commission. The rate to the Michigan points bear the same rate as Wyandotte. The Michigan Alkali, who has a captive mine in the Freeport District, is located at Wyandotte and ships a large amount of coal. That probably is the cause of the Wyandotte rate, and these other points I have shown, with the exception of Detroit, are intermediate to Wyandotte—Detroit and a few other points.

(887) On page 2 there are some points involved in the proceeding. Marion, Ohio, Mr. Boden claimed it was involved yesterday. I believe Galion is intermediate to

Marion. Those rates to Ohio are via the Erie Railroad only. I don't know as there are any rates published by other lines. I haven't checked it. It is right that the rate of $2.04 is not published by any line other than the Erie. [fol. 1398] Referring to the New York Central rates on page 3, as to whether all the rates I have shown applicable via the New York Central from the Freeport District group are rates to points intermediate either to Chicago, Illinois or Wyandotte, Michigan, or else are in the so-called Northwest adjustment—I would say that points in Ohio,—(889) I don't know whether you would call that your Northwest adjustment or not—it is true they are points that are intermediate to Chicago or Wyandotte. They are intermediate, but the rates are far less than the Wyandotte rate. The Wyandotte rate has nothing to do with these rates. Those points are just north of Youngstown. Those rates are certainly part of the adjustment involved in this proceeding; the rates to Ashtabula, Conneaut, Jefferson, Andover and Kinsman are all involved, as well as all intermediate points.

I read the order before the Ohio Commission, Docket 7252 when it came out. As I interpret that order I think the carriers could have refused to change the rate to Akron and Alliance via the P: R. R.; the Ohio Commission did not designate any routes over which the rates should apply. You have the rates (890) applying via New York Central, Minerva and Wheeling & Lake Erie into Canton. The Pennsylvania is merely a competitive road. From Ohio No. 8 to Canton via the New York Central, with P. R. R. the delivering carrier, Alliance does not necessarily have to be an intermediate point. That traffic could move New York Central to Minerva, just the same as it does to the Wheeling & Lake Erie and thence Pennsylvania, which keeps [fol. 1399] it out of Alliance. Minerva is your junction point with the Pennsylvania, and then Pennsylvania beyond from Minerva to Canton takes it over your Bayard cut-off.

By Mr. Day:

As to the Interstate Commerce Commission approving the rate from Russellton to Youngstown in the former proceeding brought by our company, (891) that was brought by the former Republic Iron and Steel Company. In that case, based upon the facts presented and I might say based

on many misconceptions of the fact, they approved a certain rate to Youngstown. I believe that was in 1923.

With respect to rates within Illinois and Indiana, shown on our exhibits, those rates apply from certain designated groups and apply according to the width of the group.

Regarding the rate shown from Danville to Chicago, a distance of 123 miles short line, it may be true that that same rate is projected as far back as Watseka or Milford, a distance of 80 miles south of Chicago, but the rate was prescribed to Chicago. The other points were not involved, they were merely intermediate. I did not check as to whether the rate is increased to stations immediately beyond Chicago. (892) I believe it is true if we had taken Rogers Park or DesPlaines or any of those stations just beyond Chicago to the north and west we would have a higher rate. I did not check as to whether the same situation prevailed [fol. 1400] with respect to the rates we show from Peoria to Chicago, but the rates were prescribed from the Peoria group to Chicago and they may apply to intermediate points. The distance of 84 miles shown from the northern Illinois fields to Davenport, Rock Island and Moline, termed the Tri-Cities district, where the stations are only a few miles apart, is considered the same destination group insofar as the mileage in my exhibit is concerned. The northern Illinois group is in the vicinity, I believe, of LaSalle, Illinois. I don't know how many mines are contained in that northern Illinois group.

(893) Our Moline plant has obtained some coal from the northern Illinois field. I can't recall if they have obtained any this year. The Moline plant has not been operating very good. I can't say whether they obtained any there last year. They use steam coal moving from various Illinois groups. The steam coal moved from Indiana, and is not Lake cargo coal. To my knowledge no coal has ever moved via lake to Chicago and Milwaukee and from those ports to Moline. The Moline plant uses a steam coal. I could not give any better description of it than that. We have a very small operation there. (894) In our Canton and Massillon plants we use coking coals, gas coals, and steam coals. The steam coals are Ohio coal. I didn't know there were any different kinds and grades of Ohio steam coal. You know, as I explained in the Ohio case, Canton and Massillon are adjacent to the Ohio fields. We

[fol. 1401] have mines four or five miles away where we obtain coal. That is all I know, is the one type of steam coal. As far as I know there is only one type of Ohio steam coal that we use. There may be some difference in steam coal according to where it originates, whether Ohio, Pennsylvania, or West Virginia, but I don't believe I could tell you just what the distinction would be, if any.

(895) During the year 1930, we got our tonnage of steam coal for Canton and Massillon from the Ohio fields, Ohio No. 8, Middle District, and from the Cambridge district, and I believe we got a small quantity from this one mine in the Massillon district. I have never seen any steam coal from mines outside of the state of Ohio moving into those plants. I would say the same thing was true in 1930. As far as I know it would be correct that there has never been any other steam coal used at our Canton and Massillon plants but that produced in Ohio. That is the natural producing point of the steam coal that we would use at Canton and Massillon because of our nearness to the mines.

By Mr. Webber:

Our company uses oil to quite an extent in the open hearths. We are using it at Youngstown, Canton and Massillon, Buffalo and Chicago right now. I can't give an estimate as to the amount we use in a year at any one of those [fol. 1402] plants. (896) Fuel oil replaces gas coal and the amount of fuel oil we use would be considerable. Maybe I can give it to you this way. At Youngstown, during normal operations we would use 20,000 tons of gas coal per month, or 240,000 tons per year. If we were using all fuel oil it would replace that amount of coal. At Buffalo it is entirely fuel oil and at Chicago it is entirely fuel oil; as I recall, at Canton and Massillon, largely fuel oil now, and we are using a lot of it at Youngstown. That is because of the low price of fuel oil. Normally in the Youngstown district we use gas coal. That is also a reason why the carriers have been losing coal tonnage in the Youngstown district. The oil comes to Youngstown in tank cars, none of it is piped in there. At Canton and Massillon it moves by tank cars. At Buffalo it is largely a water movement. We use considerable quantity (897) at Chicago, which is merely a switching service. The fuel oil is delivered into Chicago in pipe lines and then is switched over to the plant. Oil

moves from various points to Youngstown by rail, moves from Cleveland. I believe Cleveland is about the principal place we get that oil from now. It moves from mostly nearby points.

By Mr. Younger:

Some of the figures of coal tonnages I gave in my early testimony were 780,000 tons of steam coal, 716,000 tons of gas coal, 504,000 tons of low volatile coal out of the Pocahontas district, and 2,500,000 tons of high volatile coal. [fol. 1403] Those figures represent the normal consumption of coal by our company if the plants are operating fully, that is, our Youngstown district plants and Canton and Massillon. (898) The 780,000 tons of steam coal does not come exclusively from Ohio. The Canton and Massillon coal moves from Ohio. The Youngstown coal moves principally from Pittsburgh and Freeport districts, with a small portion from Ohio No. 8. Of the tonnage of 780,000, I would say 734,000 tons comes from the Pittsburgh and Freeport districts.

The Russellton mine coal is used both for steam purposes and for coking purposes, but a large part of that steam coal would be coal that is moving from commercial mines in the Pittsburgh district, but right now we are buying a very large percentage of our steam coal, a large part of it is moving by water.

The 200,000 tons of high volatile coal comes from the Pocahontas district. That 2,500,000 tons of high volatile coal would be a certain (899) percentage of that coming from the Freeport district and a certain per cent from the Connellsville District. The low volatile coal would come from Pocahontas and those related districts—Tug River. Most of it comes from Pocahontas. That coal is used entirely for coking.

[fol. 1404] So far as the personal experience of our plants is concerned, I would say that coal for steam purposes into Youngstown, Canton and Massillon districts, which are so close to the Pittsburgh and Ohio coal producing districts, there would not be any Pocahontas coal ever go there for that purpose. It is correct that we don't get any Pocahontas or Kanawha or Thacker coal for steam purposes there today, or for the last couple of years. We got some

high volatile coking coal from the Thacker district prior to that time. (900) We did not get any steam coal down there that I know of. I don't know where we got coal for Canton and Massillon just prior to 1928, when the Ohio fields were having their labor difficulties. That was before the merger. I don't know whether or not coals from southern West Virginia moved into that territory for steam purposes, but in emergency periods they have to get coal wherever they can get it. I am sure it is not correct that that condition existed for ten years. I think what you have in mind is the fact that at Canton and Massillon prior to the merger of the Republic Steel Corporation there was a considerable quantity of coal moving out of the Thacker district. The Central Alloy Steel Corporation did not own any captive mines. After the merger of the Republic Steel Corporation the high volatile coal that had been moving from the Thacker district was transferred to our captive mines in the Connellsville district.

[fol. 1405] I do not know whether southern West Virginia coals are moving to other sections of Ohio for steam purposes. (901) I can only speak with respect to Canton, Massillon and Youngstown. Southern West Virginia coals moved into those districts for domestic purposes when the steel plants are working and the people have the money to pay the price for premium coal. I wouldn't say they have to buy at a premium on account of the high freight rates that exist over there. As to paying a higher price for the coal if there is a difference in freight rate of 50 or 75 cents —there is too big a difference. For example, in 1929 Pocahontas coal was selling in Youngstown for $11.00 a ton for domestic purposes. I happen to know because I bought some. The freight rate is $2.69. You have a difference there of around $8.00, as compared with the freight rate. $8.00 represented the domestic dealers' price and the shipper's price. (902) The additional freight rate in the southern price as compared with the rate that would be paid from Ohio would be taken into account in their profit, certainly.

It is correct that I attribute the reduction which has occurred in the volume of coal, the movement of West Virginia coal into Canton and Massillon, entirely to the depression in the steel industry. It is true as to Thacker coal in 1930 that the reduction had gone to a substantial

length. 1930 was a depression year. If it was true in 1929 as compared with the preceding year, it was true then [fol. 1406] to the operations in Canton and Massillon, whatever their requirements were. As a matter of fact, as I recall it, we had a substantial supply of low volatile coals and other coking coals on hand in stock that they were using, which would change the inbound flow of coal. (903) I don't recall that the Ohio coals grew in volume. The exhibits show whether the Ohio coals grew in volume and to what extent the others fell off.

I said I paid $11 for Pocahontas domestic coals at Youngstown. Pocahontas coal in Youngstown is considered a very premium coal, smokeless coal. It is particularly true in iron and steel towns that there is a point beyond which it will not sell in competition with other domestic fuels at a lower price. When the iron and steel industries are working the towns are prosperous. Youngstown, Canton and Massillon are, you might say, solely iron and steel towns. The iron and steel industry is in a very depressed condition, especially at those points, and the people just can't buy premium coals. That is the answer to your question of domestic consumption in those towns. (904) Your own exhibit shows, I believe it was out of the Logan County fields, that in 1929, which was a very good year in the steel business as well as in others, that there was around 70,000 tons moved into Canton and Massillon. That tonnage has declined to nothing because the iron and steel industry is working at a very low rate in those towns. People are absolutely going to buy the cheaper fuels. We find it very [fol. 1407] difficult to even sell coke. Those cheaper fuels come from Ohio and the Pittsburgh District. In Youngstown they do not come largely from Ohio. As to Canton-Massillon I could not say. Ohio coal is not sold to any great extent in Youngstown. It cannot compete. I don't believe, with the Pittsburgh coal, which is a much better grade of coal. When I paid this $11 for Pocahontas, the better grades of Pittsburgh, as I remember, were selling around $5.00 (905) retail. They are selling for around $4.00 now.

Exhibits 134, 135, 136 and 137 are all that I have offered showing rate comparisons. (906) As to additional comparisons, mentioned in my testimony, I mentioned the rate on coal from Ohio points into Portsmouth, Ohio. I also

mentioned the rate on stone coated with tar and asphaltum from Youngstown back to points in the Freeport District. As I recall it, that was all the rates I mentioned. I may have mentioned some more, but that is all I can recall right now, in addition to what is in the exhibits.

As to why I confine my comparison to those shown on the exhibits and to Portsmouth, Ohio, for the purpose of demonstrating the unreasonableness of the rate from Freeport to Youngstown, I thought they were proper comparisons. The rates apply, generally speaking, from well recognized coal producing districts to large consuming points, and Youngstown is perhaps the largest consuming point of [fol. 1408] bituminous coal in the United States, that is, coal shipped by rail, with the possible exception of Chicago. (907) These comparisons deal with rates to East St. Louis, rates to Chicago and the Tri-Cities, Indianapolis, Wheeling—the exhibits speak for themselves as to what they represent. I would say the movement would generally be intrastate, but as Mr. Kern explained, they are published both by the Interstate Commerce Commission and the State Commission. They are not prescribed by any state commission. In fact, the Illinois rates and the rates to Iowa were prescribed by the Interstate Commerce Commission. It is true that the facts of my comparisons are drawn from those two adjustments, that is, the Illinois-Indiana adjustment and the rates of the B. & O. into Wheeling, West Va. (908) I agree that the Illinois-Indiana adjustment is on a lower level of rates than the Crescents adjustment generally. It always has been. If you use rates in the same general adjustment as the rates from Freeport to Youngstown, for example, in the same general territory you would get entirely different comparisons, but you have entirely different factors.

By Mr. Bull:

Referring to Exhibit 133, the average distance via all tariff routes can be easily computed. I haven't got it on my exhibit. As to the percentage on there, I made the computation at one time and put it on the exhibit. I believe it is just the same as the average distance via the B. & L. E. Houston Junction-P. R. R. route. It is 110. (909) It could [fol. 1409] be computed from that exhibit. I computed it

by adding all four columns and dividing by the number of districts.

I did not offer any evidence as to the transportation conditions in the Pittsburgh and northern Ohio districts as compared with northern Illinois.

Mr. Gutheim: Mr. Examiner, in querying Mr. Eldridge on these exhibits I want to note that I am not abandoning my objection to his evidence insofar as it may be directed to the existing relationship between Freeport and Pittsburgh.

By Mr. Gutheim:

Referring to Exhibit 130, the Whitelaw mine of the West Winfield Coal Company in the Freeport district, I have the information as to what the mine is but I haven't got that with me. I had a list of the mines that were operating today. That is not one of the mines I spoke of as in the captive class. The ones I mentioned in the captive class are the Ford Collieries Company (910) and the Inland Collieries Company. It is my understanding that the mines of those two companies and of our own Republic Steel Corporation are larger than the other mines on the railroad. I understand that the mines of the Union Collieries Company are very important mines on the Unity Railroad. As to whether those mines of the Union Collieries Company are represented here in the Western Pennsylvania com-[fol. 1410] plaint, I have no copy of your complaint. You had some mines there in the Freeport district that you represented.

The coal from the mines of the Ford Collieries Company moves principally to Wyandotte, Michigan, and that from the Inland Collieries Company mines goes principally to Indiana Harbor, Indiana. Our own coal from the Russellton mines goes entirely to the Youngstown district, principally Youngstown. (911) There are no other mines in the Freeport district other than those that are served by the Bessemer & Lake Erie Railroad as the originating carrier. I understand the two mines in the Freeport district on the Unity Railway are merely on a short line connection of the Bessemer & Lake Erie, and have no other outlet than the Bessemer. It is correct, as shown on my Exhibits 132 and 133, that all of our routes from those Freeport mines into Youngstown are two-line routes.

Referring to Exhibit 131, I show no distances, and have not computed any of those distances, so that exhibit merely makes a rate comparison. Taking the first group of Bessemer & Lake Erie destinations, they are not all points local to the Bessemer & Lake Erie north of the Freeport district. (912) They are all on the Bessemer and north of the Freeport district, and by virtue of that fact, nearer to Freeport than to Pittsburgh, and in the same category as Youngstown. The destinations shown under the heading "B. & O." in Indiana and Illinois, are all in the Chicago [fol. 1411] switching district, which is the district to which the Inland Collieries coal moves. The other destinations under "B. & O." are in the Rochester-Buffalo adjustment, that is, Rochester down to Mt. Jewett. I believe most of the destinations on the C. & N. W. Railroad, are just west of the Chicago switching district, I would say a short distance outside of it, not in the district. The destinations on the Burlington in Illinois are in the vicinity of Chicago, slightly west, I believe. (913) The same thing is true of the destinations on the Great Western, the St. Paul and the C. S. S. & B. Railroad. My Lackawanna destinations are all Buffalo or thereabouts. When you come to the D. & T. S. L. Railroad and the D. T. & I., they are all in and about Wyandotte, Michigan. That is the destination to which the Ford Collieries coal goes. The E. J. & E. points are in the Chicago switching district, and that is where the Inland coal goes. In other words, you will find that other captive mines in the Freeport group have been given a special adjustment. I would say the Erie is not a local producer of any consequence as to bituminous coal. (914) I would say a great many of these destinations are in the C. F. A. adjustment. With respect to the lower group of rates, Buffalo, Rochester, Mt. Jewett, Olean, they are in the Buffalo adjustment. The C. & E. is in the Chicago area. These Illinois Central destinations are in and about the Chicago district. The J. W. & N. is a trolley line up around Buffalo way, also in the northbound adjustment. The [fol. 1412] Lehigh Valley destinations are also in the northbound adjustment. The Michigan Central destinations are in and about Wyandotte. The Kushequa destinations are in the north-western Pennsylvania adjustment. (915) The first five destinations of the New York Central would be in and about the Chicago district. We have a good many of

the destinations in the northbound adjustment there, and including a lot of Ohio points there just north of Youngstown. As to the Nickel Plate situation, we have Buffalo and Dunkirk in the northbound adjustment, and also have the Chicago district in there. The Pennsylvania destinations are also — the northbound adjustment.

The routes of the Pere Marquette are cross-Lake Erie routes. Navigation is closed today, I believe. (916) The rates apply in two-car ferries. I don't remember just what their status was as to operations recently.

On Exhibit 132, the distances in the column headed "Short Line Distances" are absolute short line. Into the Youngstown district I would say that all of the Freeport coal—there may be a car or two of it now and then—but I would say that all of it moves to the Republic Steel Corporation, and since 1918 when the mine was first bought by the Republic Iron & Steel Company, over 95 per cent of it has moved over the short tariff route. Comparing the movement of coal illustrated in Mr. Kern's exhibits with our own mine production, which moves only to Youngstown, [fol. 1413] I would say that none of it moved to any other place. (917) I am speaking of the movement of coal to Youngstown and the Mahoning Valley which is the way his exhibit is prepared.

Referring to the fact that on Exhibit 133 I show four routes, I would say for rate making purposes I do not re- Youngstown, but show no average distance via all the tariff routes, I would say for rate making purposes I do not regard those averages via all tariff routes of any significance. As to why I show them on Exhibit 139, that exhibit is merely a correction of Mr. Kern's exhibit 33, and I have attempted to correct all the various methods of computation used by him, but you will notice that I have taken the short tariff routes shown on the exhibit and inserted it.

I think I said in my direct testimony that I took the average weight of all coal shipped into our coke plant this year from Freeport, Connellsville and Pittsburgh districts, and the (918) average weights are still holding up the same as they did when we tried the Conway and Colona case. I mean the coke plant at Youngstown.

I believe in a general way I can give you the car supply of the Bessemer & Lake Erie Railroad. They have about 1900 cars, 1050 of which are 180,000 capacity, 841 cars of

140,000. I haven't any record here of the lighter capacity. I have checked the cubical capacity of these high loading cars of the Bessemer & Lake Erie against the cubical capacity of the 70-ton carloads on other railroads. [fol. 1414] Of the 140,000 capacity cars, as I recall, they were just the same as the 140,000 capacity cars of the Pennsylvania Railroad (919) of the more commonly known type. Your 180,000 capacity cars have a greater cubical capacity. It seems to me they had about 100 cubic feet more than the average 70-ton car. I would say the 180,000 pound capacity cars are built for both ore and coal. I don't know if they will load anything like 180,000 pounds of coal. They wouldn't give them to us. That would cut down our loading exhibit. We will maintain 75 tons right along if they will give us the equipment and we have been asking them for it. We do not desire to handle any more cars than necessary to transport our coal.

I have checked our individual distances from the Freeport mines to Youngstown against the individual distances from the Pittsburgh district mines to Youngstown. There are a great many mines in the Pittsburgh district, I would say there would be quite a few (920) nearer Youngstown than the Freeport mines. A great many more than 13 are nearer to Youngstown, although located in the Pittsburgh district, than are the 13 in the Freeport district. You will find that in any group adjustment.

The Republic Iron & Steel Company sells quite a bit of the coke that it manufacturers in its by-product ovens commercially. The Russellton coal is used now to some extent [fol. 1415] in our by-product coking, depending upon the kind of steel we want to make. If we are making a Bessemer steel we can use very little Russellton coal, we use Connellsville or Pittsburgh. On other kinds of steel it is mixed with the Connellsville coal. It supplements the Pittsburgh or Connellsville coal.

I am not representing here any Freeport operators other than our own operations.

From geological maps we have there in Youngstown I would say the coal mined in the Butler-Mercer district is the same coal that i- being mined in Freeport. (921) It is the Freeport seam hat is being mined in the Freeport district. I don't know as I could tell you whether it is the upper or

lower Freeport seam. Mr. Sisler gave a pretty good outline of the different seams, as I recall it.

By Mr. Tefft:

The gist of Mr. Younger's questions, as I understood them, was that the level of rates in Indiana and Illinois was lower and had been lower over a period of many years than the level of the rates in this territory. The mere fact that a lower level of rates might prevail in Indiana and Illinois does not necessarily indicate that the level of rates that prevails in that territory is proper, but taking all factors into consideration it may be a proper showing that the rates over here are too high. (922) There is no reason that I know of why the rates in Illinois should be lower than the rates in this district, particularly to Youngstown, Ohio.

[fol. 1416] By Mr. Gutheim:

The statement I made to the effect that there were other destinations in this territory covered by my Exhibit 131 to which Freeport took a lower rate than Pittsburgh, was made as a result of a check made by me of the entire westbound adjustment. When I picked out these points I just took the more prominent points. I would not say there are ten times as many destinations where Pittsburgh and Freeport take the same rate as there are destinations where the rate differs. I can't check it right from the tariff, but this exhibit shows that to a large part of Central Freight Association territory, including points adjacent to Youngstown, the Freeport rate is lower than the Pittsburgh rate.

By Mr. Ballard:

(923) With respect to my rejection of short tariff routes from the Middle district on the ground they were unduly circuitous, I would refer to points on the Pennsylvania division running from Bayard south through Dover and New Comerstown. That would include points in the Middle District as described in the tariff. Then points on the Pennsylvania Railroad in what is called their Coshocton District, which would include points on the main line of the Panhandle division running through Uhrichsville, Bowerstown

and one other point there—the junction there with the Wheeling & Lake Erie.

[fol. 1417]. Referring to Kern's Exhibit 13, the Ohio junction point map, as an example of the route considered unduly circuitous, (924) I referred to the route of the Pennsylvania from Bayard running southwest through Oneida, Valley Junction and Dover, thence south through New Comerstown, also the main line, which is the Panhandle division running from Bowerstown through Uhrichsville, New Comerstown and Coshocton to Conesville. There is the single line route from New Comerstown via the Pennsylvania Railroad, through Dover, Valley Junction, Bayard, and then this map does not show the cutoff division of the Pennsylvania Railroad that connects with the Fort Wayne branch, which connection is at a point about five miles east of Canton, at a place called Fairhope. There is a cutoff running northwest from Bayard over to a point on the main line. I cited a lot of specific examples naming the single line distance via the Pennsylvania and also a reasonable two-line route. In many cases the two-line route would be less than half the single line route.

Redirect examination.

By Mr. Burgess:

(925) I did not attempt to name all the points where the Pennsylvania single line route was circuitous in that connection. I named many of the points, but not all of them.

On direct I said we had 780,000 tons of steam coal requirements for our plants in the Youngstown district, plus [fol. 1418] the requirements in the Canton-Massillon district. I did not attempt to make any separation as between the requirements in the Youngstown district and the requirements in the Canton-Massillon district. I haven't those figures here.

As to the coal producing groups, where the requirements are filled, the Canton-Massillon coals came from the Ohio groups; and the steam coal for the Youngstown district plants came from the Freeport and Pittsburgh groups, with a small amount occasionally coming in from Ohio No. 8. (926) That Ohio No. 8 coal would not be a drop in the bucket as compared with what comes from the Freeport and Pittsburgh districts.

[fol. 1419] GEORGE DURHAM was called as a witness and, having been duly sworn, testified as follows:

Direct examination.

By Mr. Martin:

(926) My name is George Durham, address Cleveland, Ohio. With the Wheeling & Lake Erie Railway. I occupy the position of Vice President and General Manager in charge of operation and traffic. I am also a director of the company.

I have held the position of Vice President and General Manager (927) since October, 1923, and that of director since May 20, 1927.

For about four years I held the position as Superintendent of Motive Power and Cars with that company, and six months as Acting General Manager. I have had in all 36 years' experience in railroad service. After leaving Kentucky State University I was in the employ of the Louisville & Nashville Railroad Company, as special apprentice, machinist, locomotive fireman, locomotive engineman, road foreman of engines, trainmaster, general shop foreman and master mechanic, an aggregate of approximately 17 years, and in the employ of the Delaware, Lackawanna & Western Railroad Company for five and one-half years as master mechanic.

I have caused to be prepared a map showing the lines of the Wheeling & Lake Erie Railway System, the coal districts which it serves, and its relation to the Ohio, Monongahela and Allegheny Rivers.

[fol. 1420] (Respondents' Exhibit No. 141, Witness Durham, received in evidence.)

(928) On this map the lines of the Wheeling & Lake Erie Railway Company's System, including the line of the Lorain & West Virginia Railway Company, are shown in broad blue lines, and the lines of its connections are shown in narrow blue lines. The coal districts which the Wheeling & Lake Erie Railway serves are shown upon this map, each in a distinct color. The Massillon district is colored purple, the Middle District yellow, the Crooksville district red, and

the Ohio No. 8 District, which is the principal district on the Wheeling & Lake Erie Railway, is colored green.

The number of mines in each district which are located upon the lines of the Wheeling & Lake Erie Railway are as follows: Ohio No. 8, 25; Middle, 14; Massillon, 1; Crooksville, 1.

The active mines along that portion of the Ohio River which is contiguous to the lines of the Wheeling & Lake Erie Railway are shown by numbers 201 to 211, both inclusive. Such of those mines as are equipped with tipples for loading coal direct into river barges are indicated by small red circles, and the mines which are served by rail are indicated by small triangles colored red.

The circles and numbers along the Allegheny and Monongahela Rivers indicate mines located on those rivers equipped with river tipples. The principal destination points involved in this proceeding, Cleveland, Lorain, Hu- [fol. 1421] ron, Akron, Canton, and (929) Massillon are indicated by red dots, and the principal Ohio River ports of the Pennsylvania Railroad Company and the Pittsburgh & Lake Erie Railroad Company at Conway and Colona, Pennsylvania, respectively are indicated by green dots.

The reasons which prompted our company to publish as of August 1, 1932, the reduced rates on coal from the Ohio No. 8, Middle, and Massillon Districts, to Cleveland, Lorain, Akron and other points in northeastern Ohio, were as follows:

About July 6th, 1932, the Public Utilities Commission of Ohio issued its report and order dated June 30th, 1932, in the case of Republic Steel Corporation vs. The Baltimore & Ohio Railroad Company, et al., Docket No. 7252, ordering a reduction in the rates on bituminous coal from the Massillon, Middle, Coshocton, and Ohio No. 8 Districts in Ohio, to Canton and Massillon, Ohio.

As applied to the Wheeling & Lake Erie, this order required it to reduce its rate from the Massillon and Middle Coshocton Districts to Canton and Massillon, from $1.01 to 80 cents per net ton, and from the Ohio No. 8 District to Canton and Massillon from $1.26 to $1.08 per net ton.

Upon the basis of calculating mileage adopted by the Public Utilities Commission of Ohio, these reduced rates are the same as would result from the application of the maximum scale prescribed by the Interstate Commerce Commis-

sion for the establishment of rates on coal from origin dis-
[fol. 1422] tricts in Southwestern (930) Indiana to points in Eastern Central Illinois in I. C. C. Docket No. 23922 (Sub No. 2), Coal Trade Association of Indiana vs. The Baltimore & Ohio Railroad Company, et al., 185—I. C. C.—225, and the same as would result from the application of the scale prescribed in Docket No. 23130, Intrastate Rates on Bituminous Coal between Points in Illinois, 182—I. C. C.—537. Both of these scales are referred to and discussed by the Public Utilities Commission of Ohio in its report in the Republic case.

I have caused to be prepared a statement showing the mileage scales prescribed by the Interstate Commerce Commission in the reports in these two dockets, and would like to file it as an exhibit.

(Respondents' Exhibit 142, Witness Durham, received in evidence.)

This exhibit shows that the scales are identical up to and including the 130 mile block which is the highest block in the 23130 scale. The 23922 scale extends to 300 miles.

I have caused to be prepared a map showing the railroads serving the Indiana Coal Fields and the territory described as destination territory in the case of Coal Trade Association of Indiana vs. The Baltimore & Ohio Railroad Company, (931) I. C. C. 23922, and I will file it as an exhibit.

(Respondents' Exhibit 143, Witness Durham, received in evidence.)

[fol. 1423] This map was prepared from a photostat of portions of the junction maps of the States of Indiana and Illinois issued by the Central Freight Association. The map includes outlines of the various coal districts in the southwestern portion of Indiana known and designated as the Brazil-Clinton, Linton-Sullivan, Princeton-Ayrshire, and Boonville-Evansville Districts. These districts are outlined in pink. The map also shows in colors the railroads serving these coal districts and the railroads serving the destination territory in I. C. C. Docket No. 23922. This destination territory is shown outlined in brown.

The management of the Wheeling & Lake Erie gave careful consideration to the report and order in the Republic case in order to determine whether the Wheeling should

comply with the order or contest it by joining with the other defendants in a petition in error to the Supreme Court of Ohio. We finally (932) reached the conclusion that the rates prescribed in this order represented maximum reasonable rates and that we could not consistently seek to have the order set aside in the courts. We, therefore, determined to comply with it. This immediately gave rise to the question of the effect of such compliance on the coal rates from the Ohio No. 8, Middle and Massillon districts to Cleveland and Lorain which are industrial centers in northeastern Ohio highly competitive with Canton and Massillon. Each of these cities as well as Akron, which is for all practical purposes intermediate to Cleveland, is a large consumer of coal from mines on the Wheeling & Lake Erie rails, as is [fol. 1424] evidenced by a statement which I have caused to be prepared and which I should like to introduce as Exhibit 144.

(Respondents' Exhibit 144, Witness Durham, received in evidence.)

This exhibit shows that during the six year period, 1926-1931, both inclusive, the Wheeling and Lake Erie Railway Company forwarded to these three destinations a total of 6,144,437 tons of coal, which constitutes 47.44% of the total tonnage forwarded to these three points from the Ohio No. 8 District during that period.

Where I refer to the three destinations I mean Cleveland, Lorain and Akron.

(933) It also shows that for the same period the total amount of coal forwarded from mines on the Wheeling & Lake Erie in the Ohio No. 8 coal district to Cleveland, Lorain, Akron, Canton and Massillon was 7,060,905 tons. This constituted 39.53% of the total coal tonnage originated by the Wheeling & Lake Erie Railway during that period, and 14.50% of the total tonnage of all commodities, originated by the Wheeling & Lake Erie Railway during the same period.

The statement also shows that the shipments forwarded from the Wheeling & Lake Erie Railway Company's mines in the Ohio No. 8 coal district to either Akron or Cleveland are several times as great as such shipments to Canton and Massillon combined. The tonnages to Akron, Cleveland and Lorain from mines on the Wheeling & Lake Erie Railway in

[fol. 1425] the Middle and Massillon districts are not nearly so large as those from the No. 8 district, but constitute a substantial proportion of the total shipments from these two districts to the three destinations.

It was evident that the establishment of the reduced rates required by the Public Utilities Commission of Ohio in the Republic Case would immediately place Cleveland, Lorain and Akron at a disadvantage as compared with Canton and Massillon. The management of our company felt that it could not properly (934) withhold from these cities the same measure of relief that it was obliged to afford to Massillon and Canton.

Another important factor taken into account in the voluntary establishment of these rates to Cleveland, Lorain and other northeastern Ohio points was the effect of the recently established ex-river rates on coal. In explanation of this statement it is necessary to refer to three earlier proceedings before the Interstate Commerce Commission: In Construction of Branches by Pittsburgh, Lisbon & Western Railroad Company, 150—I. C. C.—43, Finance Docket No. 6754, the commission considered the application of the Pittsburgh, Lisbon & Western Railroad Company for authority to construct two branches of its line of railroad of an aggregate length of 41.7 miles in order to form a route from Smith's Ferry, Pa., on the Ohio River to the Youngstown district, primarily for the movement of coal ex-river to points in the Youngstown district.

[fol. 1426] In its first report in that proceeding the commission found that "it is practicable and desirable that the Youngstown district should have access to the Ohio River by rail line or lines which will afford them substantially the transportation advantages, including rates, proposed" by applicant, Pittsburgh, Lisbon & Western, but withheld the authority for the construction of the new line in order to afford the Pittsburgh & Lake Erie and Pennsylvania Railroads an opportunity to show whether they would provide similar service to points in the (935) Youngstown district at reasonable rates. In the report of the commission on further hearing in Finance Docket No. 6754, 150—I. C. C.—619, the commission denied the certificate of convenience and necessity sought by the Pittsburgh, Lisbon & Western Railroad Company on the representation of the Pittsburgh & Lake Erie and Pennsyl-

vania Railroads that they would provide adequate facilities, service, and reasonable rates in connection with the transportation of ex-river coal from the Ohio River to points in the Youngstown group.

In the commission's report in I. & S. Docket No. 3282 the commission found that a rate, proposed by the Pittsburgh & Lake Erie and Pennsylvania Railroads of $1.02 per ton on ex-river coal from Colona and Conway, respectively, to Youngstown was not justified, and ordered schedules publishing that rate to be cancelled without prejudice to the filing of new schedules naming a reasonable maximum rail rate on this ex-river coal of 77 cents to Youngstown and [fol. 1427] points grouped therewith, including Warren, Ohio. Therefore, as a result of these proceedings the Pittsburgh & Lake Erie Railroad Company and the Pennsylvania Railroad Company were committed to provide transfer facilities at Colona and Conway, and publish rates of 77 cents per net ton on ex-river coal from these points to Youngstown, Ohio, and points grouped therewith, including Warren, Ohio.

That report in I. & S. 3282 is entitled "Coal (Bituminous) Ex-River from Colona and Conway, Pa., to Youngstown, (936) Ohio," and found at 163—I. C. C.—3.

The commission's report in I. & S. Docket 3282 states that, "any ex-river rate which may be established must afford a basis for the subsequent establishment of rates from Conway and Colona to Cleveland, Canton, Toledo and other large consuming points, or for trans-shipment at lake ports to the head of the lakes, otherwise undue prejudice may be created."

The points in the Youngstown district named as destination points in I. & S. Docket 3282 are highly competitive with Cleveland, Canton, Massillon, and Lorain in the production of iron and steel, and all of these points are consumers of large quantities of by-product coking coal, and the Wheeling & Lake Erie Railway Company felt it necessary to extend the benefit of these ex-river rates to its principal furnace points, namely Cleveland, Canton, Massillon and Lorain.

Accordingly on May 23rd, 1931, the Wheeling published [fol. 1428] rates on bituminous coal, ex-river, from points on its river division to Canton and Massillon of 95 cents per net ton, and to Cleveland, Lorain and South Lorain of

$1.10 per net ton. Upon protest of the Pittsburgh & Lake Erie, Pennsylvania, Baltimore & Ohio, and other railroads these rates were suspended, and following a hearing the commission, on May 31, 1932, issued its report and order in its I. & S. Docket No. 3619, 185—I. C. C.—211, authorizing the Wheeling to publish rates on bituminous coal, ex-river (937) from points on its river division to Canton and Massillon of $1.02 per net ton, and to Cleveland, Lorain and South Lorain of $1.27 per net ton, applicable on coal originating at mines on the Allegheny, Monongahela and Ohio Rivers. While in the tariff as originally filed by our company these rates were not restricted to river mines in the Pittsburgh, Connellsville and Fairmont districts, they were published to induce the movement of by-product coal from those mines, and we agreed in the course of the hearing in I. & S. Docket No. 3619 to restrict their application to coal produced at mines located along the Monongahela and Allegheny Rivers if deemed advisable by the commission. This restriction was recommended by the examiner in his proposed report, but on argument it was opposed by the Powhatan Coal Company and the Public Utilities Commission of Ohio, and the Interstate Commerce Commission did not adopt it in its final report. On the contrary, that report [fol. 1429] provided that the finding that the suspended schedules had not been justified should be without prejudice to the filing of new schedules naming rates of $1.02 to Massillon and Canton, and $1.27 to Cleveland, Lorain and South Lorain, from points on the Wheeling's river division, to apply on ex-river coal originating at mines on the Monongahela, Allegheny and Ohio rivers. (See page 221 of the report.)

The Wheeling published its interstate ex-river rates of $1.27 per ton to Cleveland, Lorain and South Lorain and $1.02 (938) per net ton to Canton and Massillon, effective July 16, 1932.

Effective on or about the same date, the Pittsburgh & Lake Erie Railroad Company and the Pennsylvania Railroad Company published ex-river rates from Colona and Conway, Pa., to Cleveland and points in the Youngstown district, including Warren, Ohio, and the Baltimore & Ohio Railroad Company and the Pennsylvania Railroad Company published rates from other river ports along the Ohio River to Cleveland, Canton and Massillon upon the same

basis as those published by the Wheeling & Lake Erie. The rates of the Baltimore & Ohio Railroad published at that time also extended to Lorain.

I have prepared a statement showing the ex-river rates now in effect from the various Ohio River ports to Cleveland, Lorain, Canton, and Massillon and points in the [fol. 1430] Youngstown district, and now wish to file it.

(Respondents' Exhibit No. 145, Witness Durham, received in evidence.)

I desire to call attention to the fact that we have included in this statement, the ex-river rates which are presently in effect as well as rates of the Pennsylvania Railroad Company from Steubenville and Bellaire to Cleveland, Canton and Massillon, which will become effective December (939) 22nd, 1932. As shown by Exhibit No. 141, Steubenville, Mingo Junction, Martins Ferry, Bellaire and Bridgeport (or West Wheeling) and all of the Wheeling & Lake Erie ports which are shown as ports of origin for ex-river coal on Exhibit No. 145 are located within the limits of the Ohio No. 8 District.

The tariffs of the Pennsylvania Railroad and the Pittsburgh & Lake Erie Railroad, applying on ex-river coal from the ports of Conway and Colona, respectively, indicate that the service of transferring coal from river barges to railway cars will be performed by the carriers at an additional charge of 10 cents per ton. The tariffs of all the carriers applying on ex-river coal from stations other than Conway and Colona specifically state that the carrier will not provide the facilities or furnish the service for unloading coal from vessels to cars and that any terminal charges at point of origin will be in addition to the rates.

There are several mines located along the Ohio River [fol. 1431] within a few miles of the Ohio River ports of the Wheeling, the Baltimore & Ohio, and the Pennsylvania, in the state of Ohio, and the application of this rate of $1.27 per net ton to coal originating at mines on the Ohio River, as well as to coal originating at mines on the Allegheny and Monongahela Rivers, made it possible for two of these mines located on the Ohio River immediately to ship coal into Cleveland for not to exceed $1.45 per net ton, made up of the ex-river rate of $1.27, and the (940) cost of towing and transferring, which amount to not more than

18 cents per net ton. These two mines are the Stop #6 mine of the Wheeling Coal Company, or Costanzo Coal Company, having a daily capacity of 2,200 tons, located at Warwood, West Va., opposite Martins Ferry, Ohio, and the Alexandria mine operated by the Valley Camp Coal Company, having a daily capacity of 1,500 tons, located between Moundsville and Glendale, West Va., about 12 miles south of Martins Ferry, Ohio, and about ten miles south of Bridgeport, or West Wheeling, Ohio.

Two transfer plants for the transfer of coal from river barges to railway cars are located on the lines of our company at Martins Ferry, Ohio, and a derrick boat has been placed in operation for the transfer of coal from river barges to cars on the tracks of the Baltimore & Ohio Railroad at Bridgeport, or West Wheeling, Ohio.

Immediately following the publication of our ex-river [fol. 1432] rates to Cleveland, Ohio, coal from these river mines began to move in substantial quantities via Martins Ferry, Ohio, over our rails through the Ohio No. 8 coal district to Cleveland at a transportation cost approximately 29 cents lower than the rate on coal from the Ohio No. 8 district to Cleveland, which at that time was $1.74 per ton.

In other words the Stop #6 mine of the Wheeling Coal Company, or Costanzo Coal Company at Warwood, West Virginia which had (941) formerly taken the same rate as the Pittsburgh district to all points in northeastern Ohio except Cleveland, and had taken the same rate as the Ohio No. 8 district to Cleveland, was getting a 29 cent advantage over the Ohio No. 8 mines to Cleveland, and the Alexandria mine which had taken the same rate as the Pittsburgh district to all points in northeastern Ohio was now getting a 29 cent advantage over the Ohio No. 8 mines to those points.

The management of the Wheeling felt that it could not consistently permit this situation to continue and that it should place the mines on its rails in the Ohio No. 8 district on a competitive basis with the river mines on the West Virginia side of the Ohio River. Therefore, after an informal conference with the members of the Public Utilities Commission of Ohio, the Wheeling management requested its authority to publish the reduced rates to Cleveland, Lorain and Akron and intermediate points from mines on its [fol. 1433] rails in the Ohio No. 8, Middle, and Massillon

districts on the basis of the scale prescribed by the Interstate Commerce Commission in Docket No. 23922. It was granted such permission by special permission order of July 20, 1932, amended July 21, 1932, in special permission Docket No. 6492 of the Public Utilities Commission of Ohio.

Testimony Taken at Columbus, Ohio, December 21, 1932

(943) CURTIS REED was called as a witness and, having been duly sworn, testified as follows:

Direct examination.

My name is Curtis Reed. I am appearing as a witness in support of Ohio Public Utilities Commission Order 8097, representing miscellaneous coal operators in the communities in the Pomeroy District. I have been given the privilege of inserting this brief testimony at this time to avoid the necessity of the adjournment to Washington, by the graciousness of Mr. Martin. I am an attorney in Columbus and have practised law here for the past several years. Prior to that time for thirteen years I was in rather intimate contact with coal mining conditions in the Pomeroy District through representation of several coal operating companies and also a short line electric railway, and I also served as prosecuting attorney during the mine labor troubles in 1925 and 1926.

[fol. 1434] Order 8097 issued under date of October 18th, effective October 28th, 1932; in effect directed respondent carriers (N. Y. C. R. R. and parties to affected schedules) to desist from (944) collecting for bituminous coal carloads, rates from mines in the Pomeroy District to destinations named which exceed No. 8 District rates thereto by more cents per ton than prior to reductions of August 1st and September 2nd, 1932. This Order of the Public Utilities Commission followed an investigation on its own motion of rates and charges for transportation of coal from Pomeroy District to Cleveland, Lorain, Huron, Akron, Orrville and Rocky River.

The investigation, however, was actually impelled by informal oral protests against the omission of the Pomeroy District from the Commission's Order No. 8072 affecting Cambridge, Crooksville and Hocking Districts under date

of September 15th, effective September 20th, 1932. It will be recalled that the reduction of the Cambridge, Crooksville, Hocking rates followed protests from those districts to the eastern Ohio voluntary reductions by carriers serving both localities. The omission of the Pomeroy District from Order 8072 can be attributed to the fact that it was not represented in the former proceeding. There was no deliberate intent on the part of the Ohio Commission to disturb the Pomeroy rate relationship.

I am offering myself as a witness in support of the Ohio Public Utilities Commission Order No. 8097; partly because I only wish to supplement detailed information already in [fol. 1435] the record by a general outline of the Pomeroy situation, and principally to permit my case to fit in at a convenient period, without expense of holding witnesses available from southern Ohio.

(945) I might state that in the hearing before the Ohio Public Utilities Commission there were more than forty representatives of the industries and business of the Pomeroy and Middleport Districts, offering to testify as to the particular situations surrounding their businesses and industries, and the same number of witnesses and representatives were anxious to appear here.

The only evidence offered the Ohio Commission or tendered here to supplement the evidence in proceeding 8072, is first: The fact already established by Mr. Kern that for many years—in fact as far back as the coal rate structure is traced in this hearing—the Pomeroy District has had the same rates to Toledo, Cleveland, Columbus and in fact to points generally north of Columbus, as the Hocking field.

It is, of course, apparent that Pomeroy distances are substantially greater than those from the other groups. That appeared on Exhibit 35, pages 15 and 16. It also appears from Exhibits introduced here that the amounts of coal shipped to the affected destination points from the Pomeroy District are relatively unimportant. These tonnages are shown in Exhibit 51.

However, our defense of the Commission's order con- [fol. 1436] sists principally of an earnest protest against adversely disturbing our competitive relationship in any respect in view of especially acute economic conditions.

(936) As may be calculated from Exhibits 92 and 93, there remains in Meigs County—which is substantially the Pom-

eroy District—nearly three hundred million tons of minable coal.

Exhibit No. 92 also shows that coal production in the district reached a peak in 1920 of one and one-half million tons, one million in 1927 and only three hundred thousand in 1931. I am informed that the proportion for the year 1932 is even less than that.

This community represents a population of perhaps 12,000 people residing in the contiguous villages of Pomeroy and Middleport and lesser towns along the Ohio River. The elimination of river transportation has made them dependent upon railroad shipments of coal and a diminishing quantity of salt. As shown by map Exhibit 90, the river mines are served by the river division of the C. & O., being connected with its southeastern terminal by an electric short-line railroad. The N. Y. C. serving what may be termed the inland mines, to which a three mile spur was constructed by that railroad some years ago.

In 1920 the principal river mining operations were purchased by the Pittsburgh Coal Company for a purchase price of approximately Two Million Dollars. Two or three years ago this company abandoned all of its mining operations in the Pomeroy District. The principal mines on the [fol. 1437] New York Central are operated by the Essex Coal Company, which has operations either itself or through affiliated companies also in the Hocking District and in West Virginia, and so while it is probably now the largest (947) single operator in the Pomeroy District its interests are naturally not chiefly concerned with Pomeroy rates.

The remaining mining operations at the present time in the Pomeroy District represents those generally consisting of some form of co-operative mining, by which the miners who are residents of the District attempt to support themselves and the communities which largely depend upon them. This community is, by the way, one of the largest coal producing districts in the state. The coal varies from the western outcrop on the western part of the district to shaft mines in the eastern part of the county or district. The market has been a changing one, fluctuating to some extent with changing ownerships and sales organizations, in addition to other causes. For example, in 1926 approximately

25,000 tons were sold in the Cleveland territory from this district. When the Great Lakes Coal Company owned mines there, their lake docks received a large amount of coal. Up until recently considerable steam coal was sold here in Columbus, and Cincinnati has been a substantial market.

It is the earnest conviction of the people of the communities dependent upon these mines that any unfavorable [fol. 1438] adjustment of freight rates, such as a mileage basis, will result in complete disaster to the community.

This situation was readily recognized by the serving carriers, formerly Kanawha & Michigan Railroad and Hocking Valley Railroad, (948) now The New York Central and the C. & O., over a long period of years. In fact, there has been little disposition on the part of producers in the Hocking District to disturb this parity.

That is the extent of the statement I wish to make.

Cross-examination.

By Mr. Day:

The rates from mines in the Pomeroy District on the C. & O. to the destinations in Northeastern Ohio involved in this case have not been changed. The rates were the same by way of the C. & O. and New York Central. The C. & O. not having been changed, they are the same as they were previously on the New York Central. That amounts to exactly 29 cents a ton difference in the rates between the New York Central and the C. & O. I am informed the increase in the tonnage from the Pomeroy Districts to Cleveland and these other northeastern Ohio destinations since the rate revision went into effect has not been substantial.

By Mr. Younger:

(949) If it is true of the Hocking District that the rate to Cleveland and points in that vicinity are 15 cents higher than the rates from the Ohio No. 8, it is also true of the Pomeroy District. I can't say how much greater the distance is from the Pomeroy District than from the No. 8 [fol. 1439] District to Cleveland. It appears on the exhibit introduced by Mr. Kern. I think it is in the neighborhood of 100 miles. I don't imagine my opinion would be worth

much as to whether or not I regard that difference between those two producing districts, Number 8 and Pomeroy, as entirely proper. We are asking for its continuance. As I say, our opinion is that at this time there is no justification for disturbing the rate relationships. I not only say that with regard to the relationships of Pomeroy vs. No. 8, Pomeroy vs. Hocking, but also apply that to other origin districts throughout the state. That is also true of adjacent states. (950) As a matter of fact, our principal competition comes from southern states. I don't offer myself as an expert on rate structures. I am merely introducing the effect of any change at this time. There is plenty of evidence in the record as to the disparity in mileage in the different situations. Supposing it appears from the evidence that the Pomeroy District is 15 cents higher than No. 8 for a difference in distance of something over 100 miles, while the Kenova-Thacker District in West Virginia prior to these recent reductions was already 50 cents higher than the Pomeroy District for an additional distance of about 100 miles, why that differential should be changed to 79 cents in my favor, as compared with a 15 cent differential from No. 8, can be defended on a competitive basis as between [fol. 1440] your producing communities, I think.

Speaking for the interests of the Pomeroy District, I would be very anxious to continue the new differential. (951) Our justification for the new differential is, there is considerable spread in mining costs, mining conditions.

As I stated before, the Pomeroy District is on the terminal end of the C. & O. River Division. If the coal business is entirely abandoned they will have about 20 miles or more of railroad with no freight transportation upon it. The same thing is true as to the New York Central to a much smaller degree. Their extension is only about 3 or 4 miles long. So as I see it, they can afford to transport freight cheaper, but particularly through a lean period or a period of depression in order to keep these mines going and in operation. I don't understand there is any time limit on the effect of these rates. Conditions always change and rates are supposed to change.

In answer to the question as to whether, if an additional distance of 100 miles from our district as compared with No. 8 to Cleveland justifies a differential of only 15 cents, an additional difference of 100 miles from these mines in

the West Virginia Districts compared with our district to northern Ohio should justify a 79 cent differential, I would say no, if — were talking about railroad earnings.

By Mr. Gutheim:

As to whether 1927, for which I gave some tonnage figures, was a year of normal operation of our Pomeroy (952) [fol. 1441] mines, I would say that year followed an adjustment of the labor trouble which occurred in 1925 and 1926, in which a somewhat lower wage scale was adopted. That is, we effected a lower wage scale in 1925 and 1926. We were running all right in 1927 and since 1927 we have been rapidly diminishing. As I say, last year only about 300,000 tons. We had labor troubles in 1932 but not between the years 1927 and 1931.

By Mr. Ballard:

I participated in the proceedings before the Ohio State Commission in Docket 8097. (953) The Commission at that hearing had the record which was made in Docket 8072 for the Cambridge and Hocking case. That was re-introduced and supplemented by a statement made by me substantially as given here today. That is all that appeared in the record. I am not offering it here. I don't know whether it is going to be offered here, I am sure. Mr. Waltermire might. If it is offered in the No. 8072 case it is not necessary to offer twice, I guess. I think it ought to be before the Commission. Docket No. 8097 is practically the same record as put in in the former case, supplemented by a statement somewhat similar to what I made this morning. (954) What I have said this morning, in substance, is that we have always been upon the same as Hocking for competitive reasons, and we and the Hocking District have been 15 cents over No. 8 for competitive [fol. 1442] reasons, and we want that to continue.

By Mr. Bronson:

The coal strikes this year did not seriously interfere with our production. They were much more severe in the No. 8 field than in Pomeroy. They began about April 1st and I am not familiar with what happened in the No. 8 District

with reference to the mines being closed down. Ours were not for any extended period of time.

By Mr. Keeler:

(955) When I mentioned the largest operator in the Pomeroy field having mines in the Hocking and West Virginia Districts, the West Virginia district I meant is in the Kanawha District. I am not familiar with the exact location. I don't think the Fairmont District is where his mines are. The name of the company was The Essex and the West Virginia mines are probably known under a different corporate name, but it is Mr. Fred Essex here in Columbus.

By Mr. Herrold:

The Essex Coal Company also has mines located in the Hocking District and in the Pomeroy District and somewhere in the Inner Crescent District of West Virginia.

I gave the acreage in the Pomeroy District and the tonnage reduced to acreage. It is about 72,000. That is minable and unmined. I gave it to you as 300,000,000 tons and I derived my information from Exhibits Nos. 92 and 93 offered by Witness Sisler. (956) The major part of that [fol. 1443] coal is where it will require an extension of the railroads. The railroads can extend directly into it, the coal lies so immediately contiguous to the present railroad. It is correct we can't ship coal to West Virginia because we have coal mines across the river and all of the river loading facilities have been abandoned. While there is some shipment it has not been considerable so far as coal is concerned. We can't ship east and we haven't enjoyed a decent market in Cincinnati for five or six years. Cincinnati is not a natural market for us any more. The only way we can ship is north.

(957) The analysis of our coal is very similar to the Hocking District. The analysis in the Pomeroy District varies some. Some of it is a drift mine coal. It outcrops in the east end of the district. The deep shaft or shaft mines are supposed to have a somewhat better analysis than the other, and the Hocking District analysis is superior to what we call our drift mine coal and probably is not any better than shaft mine coal.

We are separated from the Hocking District as a rate proposition, and given a higher rate, the feeling is there

that it will mean the end of the Pomeroy coal industry for a good many years to come.

As to how it happened that we got the same rate as the Hocking, so far as Toledo is concerned they enjoyed the same rates for a great many years, I have in mind at least 20 years, with the exception of a period of a few months [fol. 1444] when a special attack was made on the rates by the United Mine Workers of America in the Hocking District, where a reduction from $1.00 to 85 cents was secured, but that was shortly followed by the first (958) general 15 cent increase. That has been since 1917, I think. And at that time the Pomeroy District entered their protest about the advance of 15 cents. The carriers did not contest that and filed voluntary tariffs reinstating the Pomeroy District in with the Hocking District, and it has remained there ever since. There was one attack made on the parity of those rates, I think, by the Ohio Collieries Company in 1926. That is one of the companies in the Hocking District making a complaint that there was discrimination between those two districts by the joint rate, and the disparity in this district. That was as to the Pomeroy and Hocking applied to Toledo, but that complaint was dismissed before final submission to the Commission. It is correct that the complainant withdrew its complaint as regards any discrimination as between the Hocking and Pomeroy Districts and the case then was immediately disposed of without any order on the part of the Commission.

By Examiner Trezise:

(959) This order I speak of, No. 8097, really amounted to a relationship order. It did not actually result, however, in a reduction in the rate of $1.89 to $1.60 to all of these destinations. We have never sold any coal in Huron. My recollection is that is not a tariff destination. It appears [fol. 1445] in one of the exhibits that was only a 19 cent reduction to Huron.

By Mr. Bronson:

The C. & O. was not a party to any of these proceedings.

By Mr. Younger:

As to whether the order require that they establish the same rates that were currently applicable from the Hocking District, so in that respect it fixed the exact measure of the rates,—it depends on whether you are referring to the ultimate result of the order or the language of the order. I read the (960) substance of the language in my opening statement. The language of the order is to establish the rates currently in effect. I think my quotation is correct.

GEORGE DURHAM, having been previously sworn, was recalled as a witness and testified as follows:

Direct examination.

By Mr. Martin:

(961) Referring to the use of two series of numbers on the Monongahela River, one series appearing opposite the circles and one series appearing opposite lines drawn transversely to the river, the latter series of numbers is intended to show the number of the river dams, sometimes referred to in river parlance as locks. The pool above the lock or dam follows the number of the lock or dam below it. For instance, the pool immediately (962) above lock or dam No. 6 is known as pool 6.

[fol. 1446] I have some further comment to make on this exhibit. My attention this morning has been called to the fact that two mines shown as being located on the Monongahela River, namely, Chamouni Coal Company No. 14 and Reliance Coke & Furnace Company No. 17 have been abandoned during the past months. Those numbers should be marked out on the exhibit, both in the list of mines in the lower left hand corner of the exhibit, and in the mines shown by circles and numbers in the lower right hand corner.

The red dot destinations as testified to yesterday are mines having river tipples. The other red dots are the destination points in Northeastern Ohio covered by our intrastate rates or to which our intrastate rates from the coal districts apply. (963) They are the principal points. The intermediate points to that, the rates apply.

It is correct that specific rates were published to these destinations shown by red dots and specific rates were also published to points between those destinations and the three coal districts, namely, the Massillon, Middle and No. 8 Districts. These points lying between the destinations shown in red and the coal districts were not given rates under the intermediate clause in the tariff but were given the specific rates applying to what might be termed the head point; for instance, at Cleveland we applied the rate [fol. 1447] of $1.45 from the No. 8 Ohio District and then carried that rate back to Moran, which was the last station south of Cleveland which had formerly taken the Cleveland group rate of $1.74. That same plan was carried out with respect to the other stations, with the possible exception of Akron, which I believe has some stations taking the same rate as Akron which lies beyond Akron.

The effect of applying the Cleveland rate to points between Cleveland and Moran, insofar as the 23922 scale is concerned, (964) as to individual stations south of Cleveland, would give those stations lying between Moran and Cleveland a higher rate than they would have under the 23922 scale. In other words, the 23922 scale was conservatively applied in that respect. When I say conservatively I mean that we are applying the highest rate it was possible to apply under that scale. Had we figured the mileages to each of these points specifically lower rates would have been obtained to stations south of Cleveland, and if we had taken the average distance to the group a lower rate would apply to Cleveland. Moran is about twenty or twenty-five miles from Cleveland, I think.

Q. Have you compared the rates which your company established from the Ohio No. 8 Coal District to Cleveland, South Lorain, Huron, Canton, Massillon and Akron, Ohio, with the cost of transporting coal via the Wheeling and Lake Erie Railway System to the first five (5) of these points, and via the Wheeling and Lake Erie Railway and [fol. 1448] the Akron, Canton & Youngstown Railway to Akron to determine whether they are maximum reasonable rates?

Mr. Younger: I object to the question and any evidence relating (965) to it because it is irrelevant and immaterial and not addressed to any issue in this case.

Exam. Trezise: The cost of service, you have in mind?

Mr. Younger: The cost of service or any evidence pertaining to the cost of service from any of the Ohio Districts to any of the destinations involved or to any other evidence relating to the reasonableness of those rates. The only issues in this case which involve the Ohio intrastate rates under Sections 3 and 13 are matters of relationship and do not involve the question of reasonableness of the Ohio intrastate rates themselves.

[fol. 1449] (965-969. Argument had.)

(969) Examiner Trezise: The Examiner has already ruled on your objection the other day. It was not your objection the other day, but the Examiner will permit the evidence to show the character of these rates in the state. Now if you want to call it maximum reasonable rates, or whether you want to call it merely maximum and minimum rates, evidence as to that point may be introduced, and if you have an exception, of course it is noted.

Mr. Younger: Thank you. I would like for that exception to be noted.

Mr. Webber: That exception will also be noted for the respondents?

Mr. Orcutt: All carriers petitioners in the Thirteenth Section case.

Exam. Trezise: Yes.

[fol. 1450] (970) A. Yes, I have made such a comparison. The costs which I have used for that purpose are the results of a careful study based upon: (a) representative service operations involved in the transportation of coal from the Ohio No. 8 coal district to the several destinations. The essential data relating to this service having been tabulated from the company's records of (971) actual train operations during the months of January and July of the years 1930 and 1931. The records for these months were used in order that the effect upon operations of both winter and summer weather as well as traffic conditions might be fairly reflected in the results; (b) average unit costs calculated from the total freight operating expenses and statistical data of the company for the two year period ended December 31, 1931, this period being intermediate to the heavy traffic year of 1929 and the low traffic year of 1932, is deemed to be representative, and (c) tabulation from the

records of this company and of the Akron, Canton and Youngstown Railway Company of such additional data as was found necessary to a determination of the required units of service and the proper cost to be applied to such units. This study was conducted under my supervision in such a manner as to produce representative costs for the movement of coal from the Ohio No. 8 coal district, via the routes mentioned, to these six destinations.

The study contains twelve pages, the cover sheet of which [fol. 1451] bears the title, "Statements showing costs of transporting bituminous coal in carloads, from mines located upon the lines of the Wheeling & Lake Erie Railway Company in the Ohio No. 8 Coal District via the Wheeling & Lake Erie Railway to Cleveland, South Lorain, (including Lorain) Huron, Canton and Massillon, Ohio, and via the Wheeling & Lake Erie Railway, and (972) the Akron, Canton & Youngstown Railway to Akron, Ohio, and I now desire to introduce it as Exhibit No. 146. Where I refer to "the company" in my testimony I shall mean The Wheeling & Lake Erie Railway Company.

(Respondents' Exhibit No. 146, Witness Durham, received in evidence.)

Before going into detailed explanation of the exhibit I think a brief general description of the assembling and transportation service usually employed in the movement of coal from the Ohio No. 8 Coal District westbound to Brewster, Ohio, which is the first break-up terminal west of the district, will be helpful in arriving at a better understanding of the cost study.

Such general information will apply to the movement of coal, and to the study of costs as to each of the six named destinations. Reference to map, Exhibit No. 141, may be of assistance in following this explanation.

At Pine Valley, Ohio, is located the Company's principal train terminal in the Ohio No. 8 Coal District. This terminal is provided with adequate enginehouse, coal, yard [fol. 1452] and other facilities. Coal from the various mines operating in the district is assembled by mine crews at Pine Valley, Herrick, Adena and Kenwood. The loads from one mine near the summit of Rexford Hill are generally taken out and moved forward by road (973) crews. Mine crews work out of Pine Valley terminal and use two

classes of locomotives having 41,360 and 43,031 pounds calculated tractive power. Rexford Hill extends from Adena approximately to Rexford.

The assembling service consists of such classification of empty cars as is necessary to provide each mine with the kind of cars required, the movement of empty cars from assembling points to mines and the placing of them on mine tracks; the pulling of loaded cars from mines and movement to assembling point, and such weighing and classification service as may be necessary prior to road movement. This originating and assembling service is complete to the extent that very little additional switching service by road crews is necessary in the coal district or at Jewett.

For the purpose of determining the number of loaded cars of (974) coal assembled per locomotive hour, the time of all crews engaged in assembling service during the four months under study was drawn from the employes' time records. The total number of locomotive hours worked by crews in distributing cars to the mines and in assembling service during those four months was 4,181. The total number of carloads of revenue coal assembled, as tabulated from station agent's billing records, was 15,954, or an average [fol. 1453] of 3.8 loaded cars per locomotive hour. The weighted average distance each loaded car was handled in assembling service was 4.5 miles. Those figures are probably not all on the exhibit. The figures I gave are for all the assembling points.

Included in the 4,181 hours is a small amount of time consumed in switching service at Pine Valley for which no deduction has been made from the locomotive hours charged to assembling coal. Mine crews, in making trips to and from mines, also handle a few cars of other freight destined to or loaded from mine sidings. Such cars have not been included in the number of loaded cars handled. The assembling service is, therefore, conservatively calculated. Substantially all coal produced at (975) mines located in the Ohio No. 8 Coal District, on the lines of the company, must be moved westbound against a 9.06 mile grade, between Adena and Rexford.

The locomotive tonnage rating for the district from Pine Valley to Rexford, for each of the various classes of locomotives, is approximately 50% of the tonnage rating from

Rexford to Brewster. Through freight trains are operated from Pine Valley to Brewster, a distance of 63.7 miles. Instead of operating trains out of Pine Valley or Adena with full Rexford to Brewster tonnage rating, and furnishing a helper engine to Rexford, it has been found more practicable [fol. 1454] to supplement through trains with a single locomotive in puller service between Pine Valley and Jewett, the latter point being located about five miles west of Rexford. As a practical matter, the complete filling out of the tonnage of all such through trains at Jewett requires the operation of one puller trip for each through train. Ordinarily, crews operating puller runs make two round trips each day, moving with a load from Pine Valley to Jewett and returning light to the assembling district for another round trip from Pine Valley, Herrick, Adena or Kenwood, exceptions to the light return movement being certain instances when empty cars or carloads of traffic are moved eastbound by these puller crews. Occasionally a third round trip is made. The practice is to operate puller runs so that they will arrive at Jewett ahead of the through trains from Pine Valley, thus (976) providing available coal tonnage for the filling out of such through trains upon arrival at that point. Locomotives having 88,382 pounds of calculated tractive power are used in both the puller and through train service.

The first step in the cost study is to determine the number of service units required for the transportation of coal from the Ohio No. 8 District to each of the destinations which I have named.

Page 1 of Exhibit No. 146 is a statement showing the total and average number of train-miles, locomotive-miles [fol. 1455] and gross ton-miles of a representative number of trains in which coal in substantial quantities was transported in line haul from the assembling points to Cleveland. This information was tabulated from the conductors' train reports which are the source of data similarly reported to the Interstate Commerce Commission. The tabulation as shown under section A-1 covers 162 through trains from Pine Valley to Brewster.

That includes trains selected for the study in order to get as much coal as possible. We wanted to get trains that had as great a proportion of (977) coal as possible.

Approximately 99% of the loaded cars moved in these trains were cars loaded with coal. The average number of train-miles and locomotive-miles per train are the same, namely 63, indicating the use of a single locomotive on each train. The aggregate gross ton-miles for the 162 through trains was 43,614,047 or an average of 269,222 gross ton-miles per train.

Under section A-2 is shown a similar tabulation for an equal number of puller trips. The average number of train-miles and locomotive-miles per trip in this service was 14.8 miles, which is less than the distance of 19 miles from Pine Valley to Jewett. This average is lower due to the fact that the second and third trips made by the puller crews were sometimes operated only from Adena, Kenwood or Herrick to Jewett, thus involving a considerably shorter [fol. 1456] haul. The return light mileage of the puller trains shown in columns 6 and 7 average only 12.4 miles per trip as compared with the 14.8 miles shown for the loaded move which is accounted for by the fact that empty cars or carloads of traffic were moved eastbound on certain trips. The average number of gross ton-miles per puller trip was 36,697. Adding that sum to the 269,222 gross ton-miles of the through train and dividing the aggregate sum, 305,919 by 63 through train-miles, produces an average of 4,856 gross tons per through train. The tonnage rating for locomotives from Pine Valley to Brewster, with the assistance of a helper engine (978) or puller service, is approximately 7,000 tons. This performance is, therefore, substantially under that which could be accomplished, given a larger volume of coal tonnage available for transportation.

I explained earlier in the testimony that we had adopted the plan of using pullers instead of helpers, and my tonnage rating of approximately 7,000 tons is the rating where we use a helper. Now instead of using a helper we use a puller and take two trains to Jewett, an additional train to Jewett, where we double up. (979) The practice is to use puller service to move the tonnage to Jewett from Adena or Pine Valley. Now if we don't do that we would use a helper and perhaps use it from the rear end of the train to push the train from Adena to Rexford. With that service [fol. 1457] our tonnage rating would be approximately 7,000 tons from Pine Valley to Brewster, and that is what

my statement means when I refer to helper service. We don't actually use helper service.

The train is divided, and two engines take the tonnage over the hill. There are two separate trains for that tonnage. We use cabooses on our puller service.

I believe that is a fair description of the difference to say that when I speak of puller service there are two separate trains, each with one engine, and when I speak of helper service, I am speaking of one train with an engine on the head and another one on the rear. That would also necessitate, in the operation of (980) our puller service, two full crews. Where we put the double-header on what I call helper service, I would still call it a helper.

While no information as to switching service is shown on this page, I will at this point comment upon the yard service at Brewster, in order that the continuity of transportation service may be followed. Upon arrival of through trains at Brewster, they are classified by yard engines, the coal for different destinations being placed on appropriately designated tracks. Any cars that have not been previously weighed are weighed at that point. Our records show that the average number of loaded cars switched per locomotive-hour at Brewster for the entire [fol. 1458] two-year period, i. e., the years 1930 and 1931, was 8.6. The term locomotive-hours wherever used herein in connection with yard or switching service includes unproductive time account of all delays, lunch period, etc.

(981) From Brewster, coal destined to Cleveland intermediate points is moved in trains operated through from Brewster to Cleveland. Speaking generally, no full trains of coal are operated on that division. During the four months under study a large amount of coal tonnage was moved in two regularly scheduled trains designated as numbers 191 and 195. The train-miles, locomotive-miles and gross ton-miles, as shown under section B of this page, were compiled from conductors' train reports for the 242 trips made by these trains. At certain times these trains required the assistance of a helper locomotive between Brewster and a point about 3.5 miles south of Gambrinus Yard which is located just east of Canton, Ohio. On two trips the helper engine was used beyond Canton. During these months coal constituted approximately 51% of the loaded cars moved in these trains. They contained no iron

ore. As all coal handled for the two years of 1930 and 1931 averaged approximately 55.9 tons per car compared with 34.4 tons per car for all freight other than bituminous coal and iron ore, the coal in these trains, therefore, actually represented a much larger percentage of the total tonnage. It will be noted from the statement that the locomotive-miles exceeded the train-miles on account of the use [fol. 1459] of a pusher locomotive for 107 out of the 242 trains. The return light locomotive-miles are shown in column 7, which results in an average of 4.1 locomotive-miles for each through train. As the helper crews occasionally helped (982) eastbound trains, the light locomotive-miles shown in column 7 are slightly less than the helper locomotive-miles included in column 4 for the loaded movement.

Locomotives having calculated tractive power of 60,484, 80,300, and 88,382 pounds were used on the through trains. Locomotives of various classes, generally of less calculated tractive power, were used in the helper service.

As will be noted in column 11, opposite section B, the average number of gross ton-miles per train between Brewster and Cleveland was 199,261, making a total of 505,180 gross ton-miles for a through train from Pine Valley to Cleveland. That total divided by the line haul of 138 miles between those points produces an average of 3,661 gross tons per through train as shown opposite Item D.

In order to make clear the practicability of determining the cost of transporting coal in trains of an average number of gross tons whether such trains contain all coal or several commodities, I desire to point out that certain train expenses such as dispatching, wages of trainmen and enginemen, fuel and water, locomotive repairs, depreciation, [fol. 1460] enginehouse expenses, maintenance of way, etc., of moving a train of a given number of gross tons a given distance, are the same irrespective of whether that gross weight represents cars containing one commodity, or number of commodities, or irrespective of the proportion of weight of lading to tare weight. The number of (983) loaded cars required to produce a given gross tonnage will depend upon and vary with the tons of lading contained therein. As the number of revenue tons per loaded car decreases, it becomes necessary to place more cars in a train to make up a given number of gross tons. This has

the effect of increasing the proportion of dead weight to paying load; and in proportion as more cars are added to the train such items of cost as cover the use of cars, station service, assembling service and switching service, increase.

Such increased cost of operating the train allocates entirely to the lighter loading commodities. Therefore, the cost of transporting a carload of coal, containing approximately 55 net tons in a train of a given number of gross tons is constant regardless of whether the gross weight of the train is made up of cars containing all coal or coal and other commodities.

As a basis for determining cost of transporting coal it is, therefore, necessary to develop the number of service units which would be required in the movement of a train of coal containing an average number of gross tons determined from actual train operations.

[fol. 1461] I selected 162 trips from Pine Valley to Brewster for making this study I am now (984) talking about. You can take your choice as to which term to use—it is trains and trips. I stated that the average consist of those trains was 99% coal. The percentage of 50 or 51 had reference to the trains operating between Brewster and Cleveland. 51% of the cars was coal, and I stated inasmuch as the coal loaded heavier on the average than other commodities, that the percentage of loading of those trains would probably be in excess, no doubt would be in excess of the 51% of cars of coal, and that applies to trains between Brewster and Cleveland. 99% up to Brewster was all lading of coal.

A through train of coal of approximately 3,661 gross tons would require 48 loaded cars, as shown by the calculations opposite item E. The 75.2 gross tons per loaded car used in (985) that calculation is made up of 20.4 tons tare weight of the empty car plus 54.8 tons for the weight of the lading. The 20.4 tons is the average light weight per car of the steel hopper cars owned by this company suitable for coal loading.

The 54.8 tons of lading is the average lading per car of all coal originated upon the line of this company during the years 1930 and 1931.

The number of net tons contained in a train of 48 cars would be 2,630, as indicated by the calculation shown op-

posite item F. The number of gross tons for that train [fol. 1462] would be 3,630, as shown by item G. The number of train-miles and locomotive-miles required for the movement of such a through train from Pine Valley to Cleveland are shown by items H and I.

The through train-miles and locomotive-miles have been increased by the average number of train-miles and locomotive-miles made by puller and helper locomotives in assisting trains over the grades between Pine Valley and Jewett and between Brewster and Gambrinus Yard, including miles made in light movement. The movement of coal to Cleveland is therefore charged with 165 train-miles and 174 locomotive-miles for a line haul of 138 miles, which fully covers the extra transportation service made necessary by the physical situation.

The number of car-miles is 6,762, as shown by item J. The 138 miles line haul of a car from Pine Valley to Cleveland is the distance used by the Car Service Department in compiling (986) car mile statistics reported to the Interstate Commerce Commission. While in the study each of the 48 cars of coal has been charged with 138 car-miles, the cars do not actually move that far for the reason that only approximately 25 per cent of the coal moved westbound is placed in trains at Pine Valley, the remaining 75 per cent being picked up at Herrick, Adena, Kenwood or Rexford. The average haul of all coal begins about six and one-half miles west of Pine Valley; however, all through trains start from the latter point. The gross ton-mile cal- [fol. 1463] culation is shown under Item K and, for the reason just stated, this calculation is slightly in excess of the number of gross ton miles actually involved in the movement of this coal. As there is no heavy demand at Cleveland for empty hopper cars for outbound loading, it is necessary to return a large percentage of them to the mines for reloading. As a practical matter, these cars are returned in regularly scheduled trains along with such other empties and/or loaded cars as there may be in such trains. Therefore, in order to determine the cost of returning them to the mines, it is necessary, as a basis for the application of unit costs, to calculate the number of units of service required to return 48 empty cars to the mines. Under Item L is shown the calculation of the number of car miles, gross ton miles, train miles and locomotive miles which we have

used as a measure of the necessary service required for the return of 48 cars from Cleveland to the mining district on the basis of 100 empty cars per train.

(987) The calculation under Item L-2 on page 1 shows that the movement of 48 empty cars from Cleveland to Pine Valley, a distance of 138 miles, produces 137,890 gross ton miles. This is the number of gross ton miles which would be produced by moving a train of 100 empty cars a distance of 67 miles. Therefore, under Item L-3 67 train miles and 67 locomotive miles have been shown as the basis of determining the cost of returning empty cars to the mines. [fol. 1464] That this fully states such costs will be demonstrated later by check of the results as shown on page 9 of this exhibit.

The 67 locomotive miles means the number of locomotive miles for returning 48 cars. It is the number of locomotive miles required to produce the gross ton miles for returning 100 empties. I think if we follow that along, Mr. Younger, that will be developed.

At this point I will discuss the matter of switching service performed by the company at Cleveland in effecting destination delivery of coal. A large percentage of the coal arriving at Cleveland in road haul movement from the Ohio No. 8 coal district via the Wheeling and Lake Erie is delivered to connecting railroads for delivery to consumers. A compilation was made by our freight agent at Cleveland, from the station records, of (988) coal received from the Ohio No. 8 Coal District during the four months under study. This compilation showed that of a total of 2,192 cars received, 2,077 cars were delivered to connecting railroads for final spotting or delivery service, leaving only 115 cars, or approximately 5 per cent, delivered to consumers located on the lines of the company. The switching operations performed by the company upon the 95 per cent of this coal delivered to other carriers is limited to classification and interchange services, the latter being a relatively more simple operation than the so-called industrial switching involved in the 5 per cent delivered to in- [fol. 1465] dustries located upon the tracks of the company. The records of past operations do not reflect, separately, the time consumed in classification and interchange services, as distinguished from industrial switching. The service required in the classification and interchange of coal traf-

fic at that point was determined in the following manner: a ten-day study of such operations had been made in 1931. A further ten-day study was made in September, 1932. The combined studies indicated that the classification of 4,944 loaded cars required 336 switch engine hours, or an average of 4.1 minutes per car; that the interchange of 3,542 loaded cars with connecting lines required 341 engine hours, or an average of 5.8 minutes per car, and that the combined average time required per loaded car for classification and interchange service was 9.9 minutes, or 6.1 cars per engine hour. That result is a (989) fair measure of the yard switching and interchange delivery service required for the 95 per cent of the coal delivered to connecting carriers.

Exclusive of the services required in connection with coal delivered to connecting carriers, the records indicate that approximately two loaded cars per hour are handled in regular switching service to make delivery to private industries. That performance is deemed representative of the time required for the switching of the average of 5 per cent of the coal delivered on the rails of this company. In order [fol. 1466] to obtain the average switching service applicable to all of the 2,192 cars of coal delivered on the rails of both this company and of connecting lines, a calculation has been made as follows: first, dividing the 2,077 loaded cars delivered to connecting lines by 6.1 loaded cars classified and interchanged per engine hour as developed by the study provides 340.5 switch engine hours required for that service; and, second, dividing the 115 cars delivered to consignees by this company by two cars per hour, produces 57.5 switch engine hours required for effecting final delivery of those cars. This results in a total of 398 switch engine hours required to handle the total of 2,192 cars, or an average of 5.5 loaded cars per switch engine hour. However, in order to be conservative, we have used 5 loaded cars per engine hour in the study. The average amount per ton absorbed by this company on this coal on account of the charges of connecting (990) carriers for final delivery service is shown on page 11 of the cost study, and will be referred to later.

In order to complete the necessary basic data, a study was made from the car service records to determine representative average number of days required for round trip movement of a car from the Ohio Number 8 Coal District

to Cleveland and return to the district. This study covered the movement of 1,102 cars. The total time consumed in the movement thereof from the date the cars were forwarded from the district until they again reached the dis-
[fol. 1467] trict, including both forwarding and receiving dates as well as detention at destination and other delays enroute, was 10,931 car-days, or an average of 9.9 days per car. The total of 1,102 cars covers a representative number of cars moving during each of the months of the years 1930 and 1931.

A study was also made of 556 cars moving from the district to Akron which showed a total time consumed of 4,982 car-days, or an average of 9 days per car. The total of 1,658 cars studied to both destinations was then checked to determine the average time consumed in the origin district in distribution of empty cars to the mines, loading of cars at the mines, and in assembling and billing the loaded cars, including all delays in connection therewith. The 1,658 cars showed a total detention of 8,142 car-days or an average of 4.9 days per car in the district, exclusive of the receiving and forwarding (991) dates.

This results in an average time consumed for complete round trip of 14.8 days per car to Cleveland, and 13.9 days to Akron; 15 days and 14 days, respectively, have been used in the cost study.

We selected the cars we studied from representative months and movements. I do not think they cover all the cars that were handled during the particular months. I consider the showing representative.

Page 2 shows the train service data involved in the movement of coal from the Ohio No. 8 Coal District to
[fol. 1468] South Lorain. Yard facilities are provided at that point. Cars are there interchanged with the Lake Terminal, the Nickel Plate, and the Baltimore & Ohio Railroad. When I speak of South Lorain it should be understood to include Lorain, Ohio. Section A, covering the movement from Pine Valley to Brewster, is the same as the preceding page. From Brewster to South Lorain the train-miles, locomotive-miles, and gross ton-miles were tabulated for 80 trains moving through between those points. Approximately 87% of the loaded cars in these trains contained coal. (992) Mikado, consolidation and mallet locomotives with calculated tractive power ranging,

from 60,484 to 88,382 pounds are used from Brewster to South Lorain without helper service. On account of the decline in the volume of traffic in 1931 the number of through trains operated was considerably less than in 1930. As the tonnage of those trains was less than the tonnage of the trains in 1930, the effect upon the study is to reduce the average number of gross tons per through train, as well as the other service factors based thereon. The average train tonnage through from Pine Valley to South Lorain is 3,925 gross tons per train, as shown by item D. That is the equivalent of a train of 52 cars of coal, as indicated by item E. The data shown opposite items F to L has been computed in the same manner as similar computations on the preceding page. While the calculations there shown contemplate a full return movement of empty cars to the mines the fact is that, during the season [fol. 1469] of the iron ore movement, a substantial percentage of the cars made empty from the movement of coal could be used for the return loading of iron ore. Failure to take credit for this fact renders our study more conservative.

4 Very little switching service is required for the handling of this coal at South Lorain. Usually the cars loaded with coal are bunched in the inbound trains and the yard service involved consists principally of placing the cars containing coal on certain designated tracks of this company from which it is removed (993) by Lake Terminal Railroad crews. Based on the annual reports to the Interstate Commerce Commission a total of 47,403 carloads of revenue freight was handled during the two-year period which required 2,901 locomotive-hours in switching service, or 16.3 loaded cars per locomotive-hour.

For delivery of coal by the Lake Terminal Railroad Company to industries located on its line, payment of 13¢ per ton is made; for coal delivered by the Nickel Plate, payment of $4.50 per car is made to the Lake Terminal for intermediate switching and 32¢ per ton to the Nickel Plate; for coal delivered by the Baltimore & Ohio Railroad the Lake Terminal is paid $4.50 per car and the Baltimore & Ohio 19¢ per ton with a minimum of $6.30 per car.

The figures I have just given in the last sentence repre- [fol. 1470] sent switching charges of those lines absorbed by our company.

A check of the months of January and July, 1930 and 1931 showed that a very limited number of cars of coal moved into Lorain from the Ohio No. 8 Coal District over the lines of the Wheeling and Lake Erie Railway System. It was, therefore, considered that these four months would not serve as a representative period for the determination of the average switching absorption at that point. A further check disclosed (994) that prior to the year 1929 a very substantial volume of coal was moved annually from the Ohio No. 8 Coal District via the lines of the Wheeling and Lake Erie Railway to South Lorain, a large proportion of which was used by the National Tube Company, located on the Lake Terminal Railroad. However, since that time the tonnage of coal moved into South Lorain from the Ohio No. 8 Coal District via the lines of this company has been very small. It was, therefore, considered necessary to take a period which is more nearly representative, and the period selected was from January 1, 1929, to October 31, 1932. During this period a total of 10,084 tons was delivered by the Lake Terminal for which it was paid $1,310.92; 4,704 tons by the Nickel Plate on which the total charges were $1,923.78; 2,746 tons by the Baltimore & Ohio on which the total switching charges were $769.24; and 616 tons delivered locally on which no switching charges were absorbed. The aggregate amount of these charges was $4,003.94 for the delivery of 18,150 [fol. 1471] tons or 22.1¢ per ton. As there was very little coal moved from the Ohio No. 8 Coal District to South Lorain during the years 1930 and 1931, it was found to be impracticable to obtain a representative measure of the time consumed for the round trip movement of cars from the district to Lorain and return from a study of actual car movements. However, as the line haul to South Lorain is approximately the same as the haul to Cleveland; as delivery is made at both (995) points through connecting lines; and as the haul beyond Brewster is completed to each destination in one train movement, it is considered that the time consumed in making a round trip from the Ohio No. 8 Coal District to Cleveland is a fair measure of the time that would be consumed in round trip movement to South Lorain. The study is, therefore, stated on that basis, namely, fifteen days per car.

Page 3 covers the train movement of coal from Pine Valley to Huron. Again the information shown under section A is the same as that shown on the preceding pages. Inasmuch as there is very little movement of coal into Huron, except during the season of lake navigation, no through trains were operated from Brewster to Huron in the months of January. During the months of January 1930 and 1931 such train service as was necessary into Huron was performed by a yard engine working out of Norwalk. There was no coal received at Huron during either of these months from the Ohio No. 8 Coal District. [fol. 1472] It has been necessary, therefore, to base the study between those points on the month of July in each year. The necessary mileage data was taken from the records of 63 trains of which all of the loaded cars contained coal. However, some empty cars were handled in certain trains.

The principal movement of coal into Huron, taking the $1.55 rate, is that used for fueling vessels. This coal is transported in the same trains as lake cargo coal and is subject to (996) the same demurrage rules. Mallet engines are used entirely from Brewster to Huron. No helper service is required west of Brewster. The average through tonnage from Pine Valley to Huron with the use of puller service from Pine Valley to Jewett, as shown by this page, is 5,319 gross tons, or the equivalent of 70 carloads of coal. The computations under items G to L, inclusive, are similar to those shown on the preceding pages. Again in this instance the calculation contemplates 100% return movement of empty cars. The records of the company, however, indicate that during the two July months the empty cars moved out of Huron averaged approximately 50% of the inbound loaded cars. The remaining 50% was used for the loading of ore to various points. In the Spring of 1930 the dumping of lake cargo coal at Huron was commenced about one month in advance of the unloading of iron ore from vessels. In 1931 the dumping of lake cargo coal was commenced approximately two and one-half months in advance of the un- [fol. 1473] loading of iron ore. During those periods substantially all of the cars made empty from coal unloading would have to be returned empty to the mining district. The percentage of cars returned empty is, therefore, an uncer-

tain factor, and by using 100% empty return movement the study is conservative.

The records of the switching operations at Huron for those (997) months during which service was maintained at that point, for the two-year period shows an average of 8.4 loaded cars were handled in switching service per locomotive-hour. As a basis for determining the average time consumed per car in round trip movement from the Ohio No. 8 Coal District to Huron and return to the district, we have used the same number of days as used for the haul to Cleveland, namely, fifteen days, which was determined by study of the actual movement of approximately 1,100 cars, plus allowance of 3 days on account of the greater amount of delay at destination on lake coal. The round trip movement of 15 days to Cleveland is considered a fair measure of car use in movement to Huron for the reason that the distance to Huron is only seven miles in excess of that to Cleveland, and that the cars to each destination require the same number of train movements involving approximately the same amount of time. The addition of the three days to the fifteen days results in a total of eighteen days for the round trip movement. The additional delay to cars loaded with lake [fol. 1474] coal at the ports is recognized in separately published demurrage tariffs which allow five days free time in addition to Sundays and legal holidays, computed from the first 7:00 A. M. after the date on which notice is sent to consignee or party entitled to receive same. On other than lake coal the free time allowance at destination is only two days. As shown by (998) report No. AO-9 of the Ore and Coal Exchange, Cleveland, Ohio, the average number of days detention of cars loaded with lake coal at Huron was 5.78 days in 1930 and 5.41 days in 1931. This, I believe, fully justifies the additional three days for the round trip movement of a car to Huron as compared with Cleveland. As previously explained in connection with movement of cars from the coal district to Cleveland, the fifteen days there used included an average of 4.9 days for handling cars to and from mines in addition to the time consumed in line haul movement.

Page 4 is a statement showing representative train service data involved in the movement of coal from Pine Valley to Canton, and was prepared in the same manner as the data shown on page 1, covering the movement to Cleveland. The information shown for sub-sections 1 and 2, under Item A, is

the same as that shown on page 1. The 242 trains shown under section B are the same trains as used in the movement to Cleveland, but in compiling this information, only that [fol. 1475] portion of the train-miles, locomotive-miles and gross ton-miles involved in the movement from Brewster to Canton was used. As indicated by item D, the average number of gross tons of a through train from Pine Valley to Canton, with puller service to Jewett and helper service for certain trains from Brewster to a point south of Gambrinus Yard, is 4,620. Items E to K, inclusive, show the service units which would be involved in the movement (999) of a full train of coal from Pine Valley to Canton of approximately the same number of gross tons, or 61 loaded cars. Under item L is shown determination of the units of service required to measure the cost of returning 61 empty cars to the mines. While a large percentage of such cars would be returned empty to the mines at certain times during the season of lake navigation, empty cars may be taken to Huron or South Lorain for ore loading, as the cars from the lake coal trade do not always provide a full supply of empty cars for that purpose.

A careful tabulation from the records of the company of the number of loaded cars receiving switching service at that point, and of the number of locomotive-hours consumed in such service for the four months under study, i. e., January and July of the years 1930 and 1931, indicates that the switching of 32,183 loaded cars required 13,476 engine hours, or an average of 2.4 cars per hour. As the coal received at [fol. 1476] Canton from the Ohio No. 8 District during the months of January and July in 1930 and 1931 represented shipments consigned to 45 different users of coal for both industrial and domestic use, it is deemed that the average switching performance for all freight is reasonably representative of the switching service required for this coal. For that reason the average for all freight of 2.4 cars per locomotive hour has been used in the study.

During the four months of January and July of the year 1930 and 1931, there were 653 cars of coal received at Canton from (1000) the No. 8 District, 84 of which were delivered to consignees by connecting lines. The switching rate paid for that service was $2.70 per car, or $226.80 for the 84 cars so delivered. On the basis of the 653 cars re-

ceived, the payments to connecting lines average approximately six-tenths cents per ton.

No study has been made of the actual car movements between the Ohio No. 8 Coal District and Canton inasmuch as separate studies were made to Cleveland and Akron, Canton being intermediate in line haul to those destinations. The study to Cleveland shows an average of 15 days for the complete round trip and the study to Akron shows an average of 14 days, or 1 day less than Cleveland. The line haul to Akron terminates at Mogadore, which is 23 miles beyond Canton, but as a practical matter, it is considered that this additional distance requires only a slight [fol. 1477] increase in the actual time consumed in round trip movement to Akron as compared with that to Canton. It is therefore deemed that an average of 14 days per car may be conservatively used in the study to represent the round trip movement from the Ohio No. 8 Coal District to Canton, including detention incurred in the mine district.

The gross ton-mile figure shown in column 10 is the gross ton handled by the train multiplied by the mileage. (1001) The gross ton is the billing of all the cars in the train, taken from the conductors' train reports on file with the Superintendent of Car Service. It is taken from the actual weight of the cars, the stencil weight of the cars in the billing.

Page 5 is a statement showing information relating to the movement of coal from Pine Valley to Massillon. From Brewster this coal is moved to Massillon in local freight trains handling all classes of traffic. The train-miles, locomotive-miles and the gross ton-miles have been tabulated for the 106 trains operated during the four months.

Locomotives with calculated tractive power of 41,360 pounds are used in this service. The necessary service units applicable to the movement of a through train of coal from Pine (1002) Valley to Massillon of 57 cars, containing approximately 4,300 gross tons, are shown by computations [fol. 1478] reflected by items E to L, inclusive. During the months under study a total of 314 cars of coal were received at Massillon from the Ohio No. 8 Coal District, all of which were delivered to industries located on the Wheeling & Lake Erie, excepting three cars delivered by the Pennsylvania Railroad, which is negligible as respecting absorbed switching.

There is some use for hopper cars at Massillon for loading of slag, but 100% return movement of empty cars is charged in the study. As the distance from the Ohio No. 8 Coal District to Massillon is only three miles less than the distance to Canton, and as we there used the average time consumed per car for complete round trip movement to Akron, namely 14 days, that amount of time is also deemed a conservative measure of the average time required for the complete round trip movement of a car to Massillon for the purpose of use in the cost study.

The records of this company show that at Massillon an average of two loaded cars were handled per switch engine hour. While this service covered all freight, it is considered a reasonable measure of the switching service required for the delivery of this coal.

Page 6 is a statement showing data covering train service of the company involved in the movement of coal from Pine Valley to Mogadore which was delivered at that point to the (1003) Akron, Canton & Youngstown Railway for movement to Akron, Ohio. The usual practice is to move [fol. 1479] this coal in train No. 195, operated from Brewster to Cleveland. While coal is also handled to Cleveland in train No. 191, very little coal for Akron is moved in that train. At certain times during the year 1930, when the volume of coal for Akron was quite heavy, it was necessary to operate so-called turn-around trains from Brewster to Mogadore, which trains handled eastbound traffic on the return trip to Brewster. The data shown on this page was taken from the conductors' train reports for train No. 195 for the months of January and July of the years 1930 and 1931, and such turn-around runs as were operated from Brewster to Mogadore during January and July 1930. A total of 133 trains was used, the average number of gross tons of which was 4,388, as shown by item D, or the equivalent of a train containing 58 cars of coal. For the purpose of the cost study it is assumed that all of the cars made empty in this traffic would be returned to the mine district empty. As the company does not maintain yard service at Mogadore, cars for Akron are set out by train crews on designated interchange tracks. Yard crews of the Akron, Canton & Youngstown Railway then pick up the cars for movement into Akron.

We have made an investigation of the terminal-switching operations and cost of The Akron, Canton & Youngstown Railway Company at Akron, Ohio, particularly as they relate to the (1004) movement of coal via the Wheeling & [fol. 1480] Lake Erie Railway and the Akron, Canton & Youngstown Railway from the Ohio No. 8 Coal District to the so-called Akron District, which includes Akron, East Akron, Barberton, Brittain, Colona, Fairlawn and Forest Hill. Substantially all of the terminal switching operations of the Akron, Canton & Youngstown Railway are confined to the area located east of Main Street, Akron, to and including connection with the Wheeling & Lake Erie Railway at Mogadore, a distance of 7.6 miles. The principal yard is located at Brittain, approximately midway between Main Street and Mogadore. This service is performed by yard crews and the cost of such operations charged to yard expenses. While freight trains to and from points west of Akron are operated beyond Main Street to Brittain Yard, no part of the operating cost thereof is charged to yard expense. The coal moving from the Ohio No. 8 Coal District via the Wheeling & Lake Erie Railway for consumption in the Akron District is substantially all delivered by the Akron, Canton & Youngstown Railway either directly to consignees or to connecting lines within this terminal switching area.

In determining the cost of transporting such coal, it is, therefore, necessary only to add to the costs incurred by the Wheeling & Lake Erie Railway the terminal cost of the Akron, Canton & Youngstown Railway. From the records of that company the total costs assignable to termi- [fol. 1481] nal switching operations at (1005) Akron for the years 1930 and 1931 have been determined. The aggregate amount thereof is $1,149,811.85. This sum includes direct or assigned charges for all maintenance of way and structure accounts; maintenance of equipment accounts, excepting those relating to freight-train cars and passenger-train cars; transportation expense accounts; and a proportion of traffic and general expenses distributed on the basis of the previously assigned charges. The total number of loaded cars handled was 116,851 which, divided into the total switching cost of $1,149,811.85, results in an average cost per loaded car of $9.84, exclusive of charge for use of

cars. This unit cost will be used in the cost statement on page 10.

As the unit cost of $9.84 per loaded car includes the cost of destination station service, only one-half of the average station cost per loaded car of the Wheeling & Lake Erie Railway is shown in the cost statement to represent the station expense incurred at the originating station.

This coal was largely transported in cars owned by the Wheeling & Lake Erie Railway Company, excepting in 1930 certain cars owned by the Goodyear Tire & Rubber Company were used, so that the car maintenance cost of the Akron, Canton & Youngstown Railway would have very [fol. 1482] little, if any, direct relation to the cost of the transportation of this coal. For that reason the unit car service costs of the Wheeling (1006) & Lake Erie Railway are used in the cost study.

The average time consumed in complete round trip movement of cars used in the transportation of this coal from the Ohio No. 8 Coal District to Akron, including delay in the mining district, was 14 days per car, as previously stated in my testimony.

During the months of January and July of the years 1930 and 1931, a total of 2,099 cars of coal was forwarded from the Ohio No. 8 Coal District to the Akron District, via the Wheeling & Lake Erie Railway and the Akron, Canton and Youngstown Railway, of which approximately 74% was consigned to the Goodyear Tire & Rubber Company, involving a movement in switching service of approximately 5½ miles over the rails of the Akron, Canton & Youngstown Railway. In showing the required number of car-miles on page 10, item G, Column 10, to which unit costs are applied in determining total costs we have, therefore, added 6 car-miles to both the loaded and empty car-miles involved in the movement over the Wheeling & Lake Erie Railway. Of the fore-going 2,099 cars, 173 cars were delivered in interchange service by the Akron, Canton & Youngstown Railway to connecting lines for final delivery. Of that number 78 cars were delivered to the Akron and [fol. 1483] Barberton Belt Railroad, for which service a switching charge of $6.00 per car was absorbed by the Akron, Canton & Youngstown Railway and the Wheeling and Lake Erie Railway, the remaining 95 cars being (1007) delivered to the Erie and Baltimore and Ohio Railroads

for delivery, on which a switching charge of $3.15 per car was absorbed. This results in a total absorption charge of $767.25, which, on the basis of 2,099 cars and an average of 54.8 tons of coal per car, is equivalent to seven-tenths of a cent per ton.

Having determined the service units necessary for the transportation of coal from the Ohio No. 8 District to each of the six destinations which I have mentioned as shown on pages 1 to 6, inclusive of Exhibit No. 146, the next step in the cost study is to arrive at the average cost per service unit in order that we may later apply this average cost to the service units here involved.

Page 7 is a statement showing distribution of the company's freight operating expenses for the two-year period ended December 31st, 1931. The amounts included in column 1, under the heading, "Total Freight Operating Expenses", represent operating expenses assigned to freight service as reported to the Interstate Commerce Commission on pages 304 to 309 of the annual reports for the years ended December 31st, 1930, and December 31st, 1931. The amounts shown in that column have been assigned to the various classes or groups of expenses as indicated by the headings of the columns numbered 2 to 13, inclusive. Items [fol. 1484] of expenses which may be appropriately converted into unit costs (1008) by the use of like units of service are assembled in the appropriate columns in order that the number of cost calculations may be reduced to a minimum. The total of the items appearing in each column represents the aggregate amount of the expenses of a similar character or class, and by dividing the respective totals by the appropriate units of service, average unit costs are obtained. All expenses assigned to passenger and allied services in accordance with the rules of the Interstate Commerce Commission are omitted therefrom. Such expenses are treated as a separate item on the cost statement. The assignment of the amounts shown in column 1 to the various classes of expenses is briefly described as follows:

Items A-1, Yard Track Maintenance, and A-2, Maintenance of Other Tracks. The amounts shown opposite these items include the charges to accounts 202 and 226, inclusive, covering the maintenance of tracks, bridges, trestles and culverts, tunnels, right of way fences, and crossings.

The distribution as between yard tracks and other tracks is a separation made currently in accordance with instructions of the Interstate Commerce Commission. The amount expended for maintenance of yard tracks has been assigned to yard expenses, column 10, and the amount expended for road maintenance to column 2.

Item A-3; Station and Office Buildings. As substantially [fol. 1485] (1009) all of the expenditures made for the maintenance of station and office buildings are incurred in connection with the operation of station facilities, the amount of such expenses has been allocated to column 9. As no study has been made to determine the proportion of the cost of maintaining station buildings applicable to l. c. l. freight, the total amount is charged against carload traffic, column 9, which results in a slight overcharge to that traffic for station expenses.

Items A-4 and A-5: Water Stations and Fuel Stations. The amounts expended for maintenance of water and fuel stations appropriately follow the cost of fuel and water furnished locomotives and distribution has been made accordingly to columns 6 and 10.

Item A-6: Coal and Ore Wharves. The amount expended for maintenance of coal and ore wharves has been assigned to column 12, Special Expenses, which are omitted from the cost study for the reason that the expenses assigned to that column do not relate to the services covered by the line haul carload rates. The expenses included in account 243 cover facilities maintained for the purpose of loading coal into vessels and unloading iron ore from vessels, which services do not represent a part of the transportation service covered by the line haul rates. Separate charges are made for these services.

[fol. 1486] (1010) Item A-7: Telegraph and Telephone Lines. A study of this company's telegraph and telephone facilities indicates that approximately 62½% of such facilities are maintained for the purpose of dispatching trains and that that proportion of such expenses may be appropriately charged to that service. The total amount expended for the maintenance of such facilities for the two-year period was $37,736, of which 62½%, or $23,585, has been allocated to column 3, covering dispatching costs. The remaining amount of $14,151 is distributed as an item of overhead expense to the various columns through item A-8.

Item A-8: Other Maintenance of Way and Structure Accounts. This item, amounting to $645,705, includes superintendence and expenses chargeable to other expense accounts under maintenance of way and structures which cannot be distributed directly to one of the various classes of expenses. Exception is made of charges to account 235 which relate to locomotive service and are, therefore, more logically handled under section B, Maintenance of Equipment. The $645,705 includes charges to operating expense accounts 326, 327 and 328, covering maintenance of work equipment which expenses are incurred primarily for use in maintaining roadway and structures. The total shown for this item has been distributed to columns 2, 3, 6, 9, 10 and 12 on the basis of the charges previously assigned to each [fol. 1487] of (1011) those columns.

Items B-1, B-2 and B-3: Maintenance of Shops and Enginehouses. These items include the charges to account 235 covering the cost of maintaining shops and enginehouses. By reference to the underlying details the charges to that account have been distributed as follows: locomotive shops $4,166; car shops $13,774; enginehouses $46,229. The $4,166 expended for maintenance of locomotive shops has been distributed as between road locomotive expenses, column 8, and yard locomotive expenses, column 10, on the basis of the distribution of charges to account 308, Steam Locomotive Repairs. The amount of $13,774 allocated to car shops has been assigned in its entirety to car service expenses in column 11. The amount of $46,229 applicable to maintenance of enginehouses has been distributed as between columns 8, Road Locomotive Expense, and 10, Yard Locomotive Expense, on the basis of accounts 388 and 400, covering enginehouse expenses.

Items B-4 and B-5: Shop Machinery. The charges to account 302, covering maintenance of shop machinery, have also been separated by reference to the underlying records as between charges applicable to locomotive shops and those applicable to car shops. The charge of $89,483 for locomotive shops has been distributed as between road and yard costs, columns 8 and 10, respectively, on the basis of the separation of the charges to account 308, Steam Locomo- [fol. 1488] tive (1012) Repairs. The $23,284 expended for maintenance of car shops has been assigned entirely to column 11.

Items B-6-a and B-6-b; Steam Locomotive Repairs. The total amount expended for steam locomotive repairs for the years 1930 and 1931 was $1,639,683, as reported to the Interstate Commerce Commission. Of that amount $1,182,318, or 72.11%, allocates to train locomotive costs, column 8, which amount was taken from form QS-C. While the Interstate Commerce Commission has not required this form since January 1st, 1927, the company has continued to compile it for its own use. Deducting the $1,182,318 from the total expenditures of $1,639,683 leaves $457,365 assignable to yard service.

Items B-6-c: Locomotive Depreciation and Retirements. The charges for freight locomotive depreciation and retirements for the two-year period was $397,261, which has been divided as between road expenses and yard expenses on the basis of the distribution of locomotive repairs, items B-6-a and B-6-b: 72.11%, or $286,465 to road expenses, column 8; and 27.89%, or $110,796 to yard expenses, column 10.

Items B-7-a and B-7-b; Freight-Train Car Repairs. Depreciation and Retirements. The entire amounts charged to accounts 314, 315 and 316 for repairs, depreciation and retirements of freight-train cars, have been assigned di- [fol. 1489] rectly (1013) to column 11, Car Service Expenses.

Item B-8: Other Maintenance of Equipment Accounts. The charges to superintendence and other overhead accounts, amounting to $380,476, under maintenance of equipment, exclusive of the charges on account of work equipment, have been distributed on the basis of the charges previously assigned to columns 8, 10 and 11, excepting that no portion of such charge has been assigned to depreciation and retirement charges as it is not deemed proper to add overhead to such items.

Item C-1: Dispatching Trains. The expense of dispatching trains relates directly to the movement of trains in road service and has been assigned entirely to column 3.

Items C-2 and C-3: Station Employees. The total freight proportion of the charges to account 373, Station Employees, was $970,294, which includes the wages of agents, clerks and other freight office employees, warehouse employees, weighmasters, policemen, and employees of other departments engaged in transferring lading of bad order cars enroute. Warehouse employees are engaged entirely in the

handling of l. c. l. freight. Weighmasters and employees transferring lading of bad order cars are engaged almost exclusively in the handling of carload freight. Direct distribution cannot be made of the wages of agents, clerks, other freight office employees, and policemen or other (1014) common items of expense. For the purpose of arriving at [fol. 1490] a basis of distribution of such expenses, a study was made of the station agents' forces at three of the larger stations, i. e., Cleveland, Toledo and Canton, Ohio, for the months of September 1930 and 1931. The wages of clerks and other employees engaged in work relating directly to either carload or less-than-carload traffic were allocated accordingly; wages of certain other employees were allocated on the basis of the number of consignments forwarded or received, or other appropriate bases of distribution; the wages of agents, chief clerks, stenographers, etc., whose duties were of a supervisory or general character, were apportioned on the basis of the amounts previously distributed. The study covering these stations indicated that 74.74% of the total wages was chargeable to carload freight and 25.26% to less-than-carload freight. These percentages were used as a basis for distributing the aggregate amount of all undistributable station expenses for the entire line. Of the $970,294 total charges, $148,497 represented the wages of freight house employees handling l. c. l. freight; $17,159 wages of weighmasters weighing carload freight; and $5,549 transferring lading of bad order cars containing carload freight. The remaining sum of $799,089, which could not be directly assigned as between carload and l. c. l. freight, has been distributed on the (1015) basis of 74.74%, or $597,239 to carload freight, and 25.26%, or $201,850 to less-than-carload freight. This results in a total charge of $619,- [fol. 1491] 947 to carload freight, column 9, and a charge of $350,347 to less-than-carload freight, special expenses, column 12. The charge of $350,347 to l. c. l. freight represents an average labor cost of approximately $1.97 per ton.

Items C-4 and C-5: Weighing, Inspection and Demurrage Bureaus. Payments to such bureaus relate generally to freight station service. From the underlying records $5,765 has been distributed to l. c. l. freight and the remaining amount of $17,635 has been assigned to carload station expenses, column 9.

Item C-6: Coal and Ore Wharves. The amount charged to acount 375 for the operation of coal and ore wharves has been assigned to special expenses, column 12, and is excluded from the cost study for reasons previously stated.

Item C-7: Station Supplies and Expenses. While a portion of the $43,419 charges for station supplies and expenses is applicable to l. c. l. freight no part of that charge has been distributed to l. c. l. freight, column 12.

Item C-8: Yard Expenses. The entire group of yard service costs, accounts 377 and 391, are assigned to column 10, yard expenses.

Items C-9 to C-15, inclusive: Other Train Expense (1016) Accounts. The amount shown for each of these items admits of direct assignment to one of the columns of classified expenses.

[fol. 1492] Item C-16: Drawbridge Operation. Inasmuch as the three drawbridges operated by this company are located within yard limits and used almost entirely for yard operations, the amount charged to account 406 has been assigned to yard expenses, column 10.

Item C-17: Other Transportation Expense Accounts. The amounts charged to the remaining expense accounts under transportation, aggregating $1,163,862, have been distributed to the various columns on the basis of the charges previously assigned to various columns.

Item D: The total of the traffic and general expenses, including a small credit allowance for transportation for investment, is carried to column 13, and a proportion thereof added on the cost statement to the cost of transporting coal.

The totals shown opposite Item E, for each of the columns numbered 2 and 11, inclusive, and for column 13, are carried forward to column 1 of pages 9 and 10.

Mr. Martin: That affords a good stopping place, and as Mr. Durham cannot possibly finish his direct examination with relation to cost studies before 1 o'clock, I suggest this might be an appropriate time for adjournment.

(1017) Exam. Trezise: We will adjourn to reconvene January 3, 1933, and unless otherwise advised that further hearing will be in Washington, D. C.

[fol. 1493] Testimony Taken at Washington, D. C., January 3, 1933

Direct examination of George Durham (continued).

By Mr. Martin:

Continuing my discussion of Exhibit 146, page 8 shows the method employed in determining unit costs to be applied to service units which measure the use made of (1019) freight train cars in the transportation of coal from the Ohio No. 8 Coal District to the various destinations.

Certain items of the charges entering into the total cost of the maintenance of freight train cars do not vary in proportion to use. Such costs are deemed to be constant and may be more appropriately measured on a time basis. The principal items entering into the constant class of costs are depreciation, retirement charges, and that portion of the cost of car repairs which is due to deterioration.

The Interstate Commerce Commission in its Finance Docket No. 1606, in the Matter of the Final Settlement under Section 209 of the Transportation Act, 1920, 70 I. C. C. 711-743, adopted a rule for the division of expenses of freight train cars as between that remaining constant [fol. 1494] and that varying with use. In that rule 60 per cent of the cost of repairs of freight train cars is accepted as varying with use. It is also provided that the unit of measure of use is the car-miles per car. The rule further provides that the car-miles per car shall be obtained as follows: assign to owned cars on line the average car miles per car on line, and assign to owned cars off line the average car-miles per car of the country at large. As shown on this page, item 2-a, repairs have been distributed as between constant expenses and expenses varying with use on the basis of 40 per cent and 60 per cent, respectively. Items 2-b and 2-c, depreciation and retirements, are treated as constant expenses. All of the necessary factors and computations (1020) are shown in detail on this page. By referring to item 7, the constant expense per car per day in service is found to be 48.3 cents. Item 15 shows that the portion of expenses varying with use averages $1.003 per 100 car-miles. This method of determining car costs takes into account both the time involved and the distance used.

These unit costs will be used on pages 9 and 10 of the cost study.

It will be observed from calculations opposite items 7 and 8 that the average cost of the constant charges per car per day has been increased 36.4 cents to 48.3 cents in order to add to the cost of maintaining the cars in service such constant charges as are applicable to stored and unserviceable cars.

[fol. 1495] A final step in the cost study is the application of the average unit costs to the units of service involved in the transportation of coal from the Ohio No. 8 Coal District to the destinations involved.

I shall now take up pages 9 and 10, which cover the computation of freight operating unit costs and their application to the service units required in the transportation of coal to Cleveland, South Lorain, Huron, Canton, Massillon and Akron, Ohio. Page 9 covers the first three named destinations and page 10 the last three. The bases used in determining average unit costs are shown on the left side of the pages, columns 1 to 4, inclusive. This side of the two pages is the same (1021), being repeated only for convenience. The application of the average unit costs to the required service units is shown on the right side of the pages, columns 5 to 11, inclusive.

I shall first discuss briefly the determination of the average unit costs, and where it seems necessary, give our reasons for an explanation of the use of certain bases for determining costs and making charges.

I desire to say in this connection that wherever it has appeared that the average unit costs, as determined from the operating expenses for the two years might not be sufficient to fully cover the service in connection with the transportation of coal from the Ohio No. 8 Coal District to the various destinations, we have made adjustments to fully compensate for the difference. I shall mention these ad-
[fol. 1496] justments at appropriate points in my testimony.

Charge for the use of tracks and appurtenant structures, other than yard tracks, has been made upon the basis of gross ton-miles. The unit cost was determined by dividing the total amount expended for maintenance during the two-year period as shown in column 1; opposite Item A, by the total gross ton-miles shown in column 3. The resulting unit cost

of 47.9 cents per 1,000 gross ton-miles is shown in column 4. This basis fully measures the use of the track.

Charges for dispatching trains has been made upon a train-mile basis for the reason that such expenses are more directly related to train operation and the distance moved, as (1022) measured in the train-miles, than to the gross ton-miles or the car-miles resulting therefrom.

A study of the miles run and the miles paid for wages of trainmen of the trains under study from Pine Valley to each of the destinations involved shows that the constructive miles paid for in excess of the average for the entire railroad, as reported to the Interstate Commerce Commission, for train crews was 7.63 per cent to Cleveland and Canton; 8.04 per cent to South Lorain; 4.80 per cent to Huron; 13.98 per cent to Massillon; and 8.46 per cent to Akron. In the cost study, pages 9 and 10, the average cost per train-mile of 34.1 cents for wages of trainmen, item B-2 is increased by 10 per cent to Cleveland, Canton, South Lorain, and [fol. 1497] Akron; 5 per cent to Huron; and 15% to Massillon. The constructive miles paid engine crews in excess of the average for the entire railroad was 7.03 per cent to Cleveland and Canton; 6.98 per cent to South Lorain; 3.74 per cent to Huron; 12.92 per cent to Massillon; and 7.76 per cent to Akron. As the rates of pay of engineers and firemen are higher for heavier locomotives, and as the locomotives used on these trains were heavier than the average of all freight locomotives used during the years 1930 and 1931, a further adjustment is necessary in the average cost of wages of enginemen per locomotive-mile. A study in this respect indicates that the rates of pay of the engine crews, on the trains studied, to Cleveland and Canton were (1023) 9.59 per cent; to South Lorain 11.59 per cent; to Huron 13.25 per cent; to Massillon 12.08 per cent; and to Akron 12.77 per cent in excess of the average.

The combined adjustment on account of excess constructive mileage paid for and increased rates paid engine crews by reason of heavier locomotives is 16.62 per cent to Cleveland and Canton; 18.57 per cent to South Lorain; 16.99 per cent to Huron; 25.00 per cent to Massillon; and 20.53 per cent to Akron. An even 20 per cent increase is, therefore,

applied to Cleveland, Canton, South Lorain, Huron, and Akron, and 25 per cent to Massillon.

Charge for train supplies and expenses has been made upon the basis of car miles for the reason that the prin- [fol. 1498] cipal items chargeable to this account justify the allocating of this cost upon a car-mile basis.

Charge for locomotive fuel and water has been made upon the basis of gross ton-miles, obtained by dividing the total cost shown in column 1 opposite item B-4 by the gross ton miles, shown in thousands, in column 3, which gives an average of 17.1 cents per 1,000 gross ton miles.

This average, of course, represents all classes of locomotives in all classes of road freight service. The consumption of fuel and water decreases to a certain extent with the increased weight of the train, but not in direct ratio. There is a generally recognized saving in fuel with increased train (1024) loading. Inasmuch as the number of gross tons of the trains here studied is greatly in excess of the average number of gross tons for all freight trains operated, the charge here made to the transportation of this coal for fuel and water is overstated.

The result of a very careful study in this connection in the past indicated that the consumption of fuel per 1,000 gross ton miles decreased about one-half of 1 per cent for each 1 per cent of increase in train loading.

Charge for wages of road enginemen and firemen has been made on a locomotive mile basis, adjusted as previously referred to.

Charge for locomotive repairs, locomotive depreciation, lubricants and enginehouse expenses in road service has [fol. 1499] been made upon the basis of locomotive miles. Locomotive cost increases substantially with increase in size of the locomotives. The calculated tractive force is a reasonably accurate measure of the size. As shown in column 4, on the line opposite item B-6, the average locomotive cost per locomotive-mile is 67.9 cents. The weighted average tractive force of the locomotives used in the trains transporting coal to each of the destinations here under consideration exceeded the average tractive force of all freight locomotives maintained. The excess tractive force used to the various destinations over the average for all road locomotives for the two-year (1025) period was approximately 41 per cent to Cleveland; 47 per cent to Can-

ton; 51 per cent to South Lorain; 55 per cent to Huron; 49 per cent to Massillon, and 52 per cent to Akron. The average cost per locomotive-mile of 67.9 cents has been increased by the foregoing percentages to the respective destinations. After a careful study of this method of adjusting unit locomotive costs, it is deemed that the adjusted results are reasonably representative of the true costs.

Charge for assembling service, including the placing of empty cars at and returning the loaded cars from the mine, has been made upon the basis of train-hours. Operating expenses in connection with assembling service are included in the accounts covering road service expenses. [fol. 1500] The total expenses of $5,459,001, shown opposite Item D, include all of the items of expenses appearing under Section B, covering road service. The total of 268,898 train-hours was taken from Forms OS-A to the Interstate Commerce Commission for the years ended December 31st, 1930 and 1931. The total cost divided by the total number of train-hours produces an average cost per train-hour of $20.301. The use of this average rate per hour for assembling service results in considerable overcharge for the reason that the average tractive power of the locomotives used in this service is approximately 26 per cent less than the average of the tractive power of all freight locomotives used in road service. This results in overcharges in locomotive and fuel (1026) costs. Also, relatively less overtime is paid train and engine crews in assembling service than was paid in all classes of road freight service. No downward adjustment, however, has been made in the average unit cost for assembling service because of such overcharges.

Charge for station expenses has been made upon the basis of revenue carloads, the unit cost having been determined by dividing the total number of revenue carloads of freight handled during the two-year period 1930 and 1931, as shown on page 519 of the annual report to the Interstate Commerce Commission, into the total amount of station expenses allocated to carload service. This results in an average cost per loaded car of $1.319.

[fol. 1501] Charge for switching service has been made upon a switch engine-hour basis. The number of switch engine-hours was determined by dividing the number of yard switching locomotive-miles in freight service, shown

on page 508 of the annual reports to the Interstate Commerce Commission, namely, 2,319,491 miles, by six miles per hour, producing 386,582 locomotive hours. This reverses the procedure by which the switching locomotive-miles were arrived at in the first instance.

Charge for use of freight cars has been made partially upon a car-mile basis and partially upon a daily basis, as previously explained in connection with page 8.

(1027) Special expenses are omitted from consideration in making charges for transporting coal for reasons previously stated.

Charge for traffic and general expenses has been made by increasing the total of the direct costs by the 9.95 per cent, obtained by dividing the total amount of such expenses by the total direct operating expenses.

Charge has been made for proportion of the deficit resulting from passenger-train operations in order that the cost of transporting this coal may bear its proportion of that deficit. Based upon annual reports to the Interstate Commerce Commission, passenger train operations for the years 1930 and 1931 showed a deficit of $582,779, which is [fol. 1502] equal to 2.89 per cent of the total freight operating expenses, including traffic and general expenses.

Effective June 1, 1932, the passenger train operations were reduced from six trains to two trains daily, so that this loss is now, and for the future will be, substantially less than that for the years 1930 and 1931.

On the right side of pages 9 and 10 there is shown application of the various unit costs appearing in column 4 to the service units required for the movement of coal from Pine Valley to Cleveland, South Lorain, Huron, Canton, Massillon and Akron. The number of service units required for the movement of an average train of coal to each of these destinations is shown in columns 6, 8 and 10 of pages 9 and 10. (1028) Those service units shown under Divisions A, B, C and E, covering track maintenance, loaded road haul, empty road haul, and station costs, have been determined on and carried forward from pages 1 to 6, inclusive. The number of cars handled per engine-hour in assembling service in the origin district and in switching service in the various yards and the number of car-days per car have been previously stated in my testimony in explaining the service to each destination.

Adverting now to the cost, as found, of returning empty coal cars from the various destinations under study to the Ohio No. 8 Coal District. The practice of returning empty [fol. 1503] cars from all of the points is the same as from Cleveland, which I have already described, except that occasionally it has been necessary to move solid trains of approximately 100 empty coal cars from Huron to the Ohio No. 8 Coal District for reloading.

The same method of ascertaining the number of service units necessary for the return movement has been used in each case, and is shown under Item L of pages 1-6, inclusive. The same method of applying costs to the service units necessary for the return of empties has been employed in each instance.

A simple method of checking the costs of returning empties as shown by the study is to reduce the expenses shown in Section A and B to a gross ton mile basis, and apply the cost thus found to the gross ton miles necessary to the return (1029) of the empty cars.

To illustrate, by application of this test to the return of empties from Cleveland: Dividing the $7,821,628, which is the total of Sections A and B, by the total gross ton miles of 4,933,332 (thousands) shown at the top of column 3, produces an average cost of $1.5855 per thousand gross ton miles. Applying that unit cost to the 137,890 gross ton miles necessary to the movement of 48 empty cars from Cleveland to Pine Valley, produces a total road haul cost of $218.62, or $4.55 per car as compared with $228.03, or $4.75 [fol. 1504] per car shown by the study. While this calculation is not as refined as that used in the study, I believe it constitutes a fair check of it.

As a further means of checking the cost of returning empty cars, we have tabulated from records covering the movement of 5 full trains of empty cars eastbound from Huron to Brewster and 5 trains from Brewster to the Ohio No. 8 Coal District, the actual wages paid train and engine crews and the cost of locomotive fuel used. For the purpose of determining other items of cost not directly obtainable, the number of cars, train-miles and locomotive miles was also taken from the records, which reflected an average of 102 cars per train, a total of 725 train-miles, and 725 locomotive-miles. The movement of an average of 102 empty cars per train (plus caboose) for five through

movements from Huron to Pine Valley (1030) produces 74,675 car-miles and 1,523,080 gross ton-miles. To these units of service were applied the average costs reflected in column 4 on page 9 of the study. The aggregate cost so obtained for the five through movements from Huron to the Ohio No. 8 Coal district, including cost of wages and fuel, was $2,349.61, or an average cost per car of $4.61. The total cost for the return of 70 empty cars from Huron to Pine Valley, as shown in column 11, against Section C, was $355.10, or $5.07 per car, or approximately 9.1 per cent [fol. 1505] in excess of that shown by the test-check covering five full trains of empty cars from Huron to the Ohio No. 8 Coal District.

I believe these two methods of test-checking the costs reflected by the study fully justify the results there obtained.

Opposite Item N, in columns 7, 9 and 11 of pages 9 and 10, will be found the total average costs, including overhead items and deficit from passenger operations, per net ton for transporting bituminous coal from the Ohio No. 8 Coal District to the respective destinations as follows:

80.2 cents to Cleveland; 75.8 cents to South Lorain; 79.1 cents to Huron; 63.9 cents to Canton; 65.2 cents to Massillon; and 78.5 cents to Akron, Ohio.

After having studied the cost of transporting coal from the Ohio No. 8 Coal District to these various destinations, (1031) I do not consider that the use of the average cost per net ton-mile of moving all traffic or the average operating ratio resulting from the movement of all traffic, would correctly measure the cost of transporting such coal, for the reasons that the average loading per car of such coal is very much greater than the average loading per car of all other freight commodities, exclusive of iron ore; that particularly as to Cleveland, South Lorain, and Huron, its average movement is substantially longer than the average haul of all freight and, as it involves only a [fol. 1506] one line haul or local movement, excepting as to Akron, substantially higher revenues per loaded car and per ton are received from it than is received from all other coal or from the average of all other freight traffic, a large percentage of which is handled in inter-line and overhead movement.

Page 11 of Exhibit 146 is a statement showing average

amount per net ton of switching charges of other railroads absorbed by The Wheeling and Lake Erie Railway Company for delivery at Cleveland, Ohio, of coal which originated in Ohio No. 8 District. This statement shows the distribution, by railroads, of the 2,192 carloads of coal received at Cleveland from the No. 8 District during the months of January and July of the years 1930 and 1931, as previously referred to in my testimony relative to switching service at Cleveland. (1032) To the number of tons of coal delivered to each of the connecting lines for spotting or final delivery service has been applied the rate per ton, in cents, paid those carriers for such service. The average amount absorbed on the total tons of coal received at Cleveland during those four months was 16 cents per ton.

Page No. 12 of Exhibit 146 is a summary statement showing the gross receipts or rate per ton; absorbed switching charges, net revenues; transportation cost; and net operating revenue per ton of coal transported from the Ohio No. 8 Coal District to Cleveland, South Lorain, [fol. 1507] Huron, Canton, Massillon and Akron, Ohio, and the operating ratio.

This page shows that out of the $1.45 rate to Cleveland there will remain a net operating revenue of 48.8 cents; that out of the $1.45 rate to South Lorain, there will remain a net operating revenue of 47.1 cents; that out of the $1.55 rate to Huron, there will remain a net operating revenue of 75.9 cents; that out of the $1.08 rate to Canton and Massillon, there will remain net operating revenues of 43.5 cents to Canton, and 42.8 cents to Massillon, and that out of the $1.28 rate to Akron, there will remain a net operating revenue of 48.8 cents.

(1033) In view of the fact that the various units of service required for the transportation of coal from the Ohio No. 8 District to Cleveland, Lorain, Huron, Canton and Massillon over the Wheeling & Lake Erie Railway and to Akron over the Wheeling & Lake Erie and the Akron, Canton & Youngstown Railway have been determined from the records of representative actual operations; that average unit costs are based on total freight operating expenses for a two-year period; that such average unit costs include not only all direct items of expense, but also a proportion of all supervisory and other overhead expenses relating to

maintenance of way and structures, maintenance of equipment, and conducting transportation operations; that proportions of traffic and general expenses and loss from passenger train operations have been added; that average unit costs resulting in inadequate charges have been adjusted upward; that average unit costs producing excessive [fol. 1508] charges have not been lowered; and that uncertain factors have been resolved in favor of conservativeness, the cost study is deemed to have been accurately and conservatively stated, and from the standpoint of cost of service I am of the opinion that these costs justify the rates established by The Wheeling and Lake Erie Railway Company as maximum reasonable rates.

(1034) In further comment of my cost study, I would say at page 939 of the record, in explanation of my Exhibit 145, which is a statement showing ex-river rates in effect from the various Ohio River ports to Cleveland, Lorain, Canton and Massillon, and points in the Youngstown district, I stated that the tariffs of all of the carriers applying on ex-river coal, from stations other than Conway and Colona, specifically state that the carrier will not provide the facilities, or furnish the service, for unloading coal from vessels to cars, and that any terminal charges at point of origin will be in addition to the rates. I find that there is an exception to this in the case of the Pennsylvania Railroad tariffs under which that company, by proper publication in delivery tariff, may, and does, absorb certain terminal charges such as reciprocal switching.

At page 976 of the record, in response to a question of Mr. Day, I stated that the 162 through trains shown in Section A-1 on page 1 of Exhibit 146, were selected for the study in order to get as much coal as possible. What [fol. 1509] we did was to select trains which are fairly representative of those in which most of our coal traffic is handled.

An examination of our work sheets shows that west of Jewett 16 of these trains consisted of less than 40 loaded cars; 17 contained 40 to 49 loaded cars; 10 contained 50 to 59 loaded cars; 12 contained 60 to 69 loaded cars; 43 contained 70 to 79 loaded cars; 48 contained 80 to 89 loaded cars, (1035) and 16 contained 90 to 100 loaded cars. That is of all freight, not merely coal. And, as I stated before,

those trains contained an average of slightly over 99 per cent coal. There were a few cars of other freight.

Mr. Martin: Mr. Examiner, that concludes the direct testimony of Mr. Durham with respect to the cost study, and, in accordance with the arrangement made at the time he went on the stand, I should like now to withdraw him from the stand, with the privilege of recalling him after certain other witnesses have testified as to matters which will be preliminary to the remainder of his direct testimony. If there are any questions desired to be asked for information on the cost study at this time, I am perfectly willing to have that done; but I assume that the cross-examination on his entire direct testimony will be deferred until he concludes it.

Examiner Trezise: If there are no such questions, I think [fol. 1510] it will be satisfactory to go ahead with the plan you have outlined, and you may withdraw him at this time.

H. A. Eberhart was called as a witness, and, having been duly sworn, testified as follows:

Direct examination.

By Mr. Martin:

(1036) My name is H. A. Eberhart, Assistant General Freight Agent, Wheeling & Lake Erie Railway Company, Cleveland, Ohio. I have held that position about five years.

I have prepared a statement, which I desire to offer as an exhibit, showing the commercial coal rates and divisions thereof from the principal southern districts over various routes to Cleveland, Canton, Massillon, Lorain and Akron, Ohio. The rates were obtained from tariffs of the origin lines. The tariff authorities are noted in this exhibit. The divisions were taken from division sheets in the public files of the Interstate Commerce Commission.

Mr. Orcutt: Mr. Examiner, the respondents object to any testimony or exhibits having to do with divisions of rates. The Commission has many times held that they are [fol. 1511] no indication of the reasonableness of any other rates.

Mr. Martin: Mr. Examiner, this exhibit is not offered in any sense to test the reasonableness of any of the rates in issue directly. It is offered as preliminary data in connection (1037) with some testimony concerning revenue discrimination which will later follow.

Mr. Orcutt: The question of divisions of rates, Mr. Examiner, has nothing to do with a revenue study in a case like this—a revenue discrimination case.

Mr. Martin: I think we will be able to show that it does, and I feel that the exhibit should remain in for that purpose.

Examiner Trezise: The Examiner will receive it at this time, and unless something develops later on showing that it ~~should not~~ be received, it will remain in the record. We will receive it in evidence at this time.

Mr. Martin: Thank you.

Mr. Orcutt: Exception, please.

(Exhibit 147, Witness Eberhart, received in evidence.)

(Narrative continued.) I stated that I obtained the data as to divisions from the division sheets of the carriers on file with the Interstate Commerce Commission. In selecting the origin districts which I have shown upon this exhibit, I first took the tariffs of the origin lines, having in [fol. 1512] mind the various origin districts in the Inner and Outer (1038) Crescents, and then proceeded to determine what the divisions were, after having noted the rates and computed them as they show on this exhibit. I consider that the origin districts I have shown on this exhibit are the principal origin coal districts in the Outer and Inner Crescents, exclusive of the districts served by the Louisville & Nashville Railroad.

I do not show the origin districts served by the Louisville & Nashville Railroad, for the reason that at the time I was preparing the figures on this exhibit, there were short in the Commission's file—or, at least, we were unable to find them—the division sheets of the Louisville & Nashville. There were some in the file; but, so far as Cleveland, Ohio, was concerned, as an example, we could not readily turn up the division sheets covering routes from the Louisville & Nashville origin districts to Cleveland.

I ascertained from the representative of the Commission in the public file room that some of the Louisville & Nash-

ville sheets were then being requested by the Commission of the Louisiville & Nashville. A later check develops that some have come in, but not what you could call a complete line-up.

The districts served by the Louisiville & Nashville (1039) to which I refer, are the Hazard, McRoberts and Harlan [fol. 1513] Districts, also the Stonega and South Jellico Districts. I have selected the principal representative districts served by the Norfolk & Western and the C. & O., and the principal routes over which coal moves from those districts. The mileage authorities are shown, as well as the tariff authorities, at the bottom of page 10. I have shown here only the mills per ton mile and the distances for the so-called northern carriers. The divisions of the southern carriers are shown, but the distances and the mills per ton mile of those carriers are not shown.

Cross-examination.

By Mr. Orcutt:

(1040) I do not show my divisions from the Fairmont District because, as I recall it, we do not have very many routes from the Fairmont District—not merely so many that could be called representative. The divisions that I have shown here are not based on the number of routes. I took these divisions because we thought they were representative of the earnings of the Northern carriers on the coal that originates in these districts, and the statements of the Ohio Bureau of Coal Statistics show that there is a large volume of coal. We took these as representative. I consider our own line a northern carrier, and am comparing these routes with the northern carriers. (1041) We can produce our own route from Fairmont, if you desire [fol. 1514] it in the record. Fairmont is not a southern district. That is the reason I do not quite get the idea as to the question why I did not show my own route from Fairmont. The rates from the Fairmont District are not the same, and I do not imagine that the divisions are the same. As to why I limit it to the southern regions, this gives a very fair picture, and it seemed to us to be representative. The other information is available. If it is wanted, we can get it and put it in. This is a very fair picture of the earnings of the northern carriers, for the

distances involved, on the coal that moves from these origin districts. (1042) We picked these particular origin districts to show the earnings of the northern carriers because we thought these were representative. We thought this was a fair level of the earnings of the northern carriers on this particular coal.

By Mr. Day:

I do not show any Wheeling routes or distances on my exhibit. Lack of time kept us from working up that information. Our company is a party to joint rates and through routes from all these southern producing districts. As to not showing any New York Central rates or divisions from the Kanawha District, we show the C. & O.-Big Four route from the Big Sandy and Kanawha Districts. (1043) We believe that this showing is representative, and that the Big Four is certainly recognized as part of the New York Central system. The New York Central serves the Kanawha District. There are no New York [fol. 1515] Central rates, that is, with the New York Central as the origin carrier, from the Kanawha District. As to not showing any routes from any of the southern fields working through Columbus, via either the B. & O. or the Wheeling & Lake Erie and thence via Zanesville and the Wheeling, I have that worked up and will produce it. The divisions which accrue to the Wheeling & Lake Erie are comparable with the ones shown on this exhibit, speaking of them as northern lines. (1044) Generally speaking, it is correct that there is the same character of divisions in effect with the Wheeling as there is with these other northern lines. As to whether the same division of rates prevails on traffic originating in the Ohio fields and moving over two or three lines to these particular destinations, of course that depends on the origin and destination and the distance between the points. The divisions are usually made on a mile-for-mile basis. I would say that, if all conditions were comparable, you would find the divisions averaging about the same. In some cases they would vary. I think you will find, if anything, that the divisions between two or three railroads in Ohio and in the northern territory pay slightly higher than these divisions shown on this sheet (indicating). (1045) That is not in all cases where the distances are appreciably shorter

from Ohio. It would be a hard question to answer in a general way that where the distances are approximately [fol. 1516] the same the divisions are approximately the same via similar routes.

By Mr. Orcutt:

I do not happen to have the figure in mind or with me at the present time as to what division we get from the Pittsburgh District to Cleveland on coal originating on the Pittsburgh & West Virginia under the $1.55 rate. On the $1.84 rate it would be the same division. I do not remember off-hand what that division is. I think it is correct that that same divisional arrangement has existed for many years.

By Mr. Younger:

(1046) In selecting these particular origin districts and these routes, rather than others, I said nothing about the rates or the reasonableness of them. I said they were the tariff rates as they happened to be.

Redirect examination.

By Mr. Martin:

What I said was, in effect, that these were representative divisions. It did not include every division. It was, however, a showing of representative routes and representative divisions. The origin districts which I selected, and to which I limited myself in the preparation of this exhibit, were the so-called southern districts in the Inner and Outer Crescents. The Fairmont District is not in the Inner or Outer Crescent as to these destinations.

Recross-examination.

[fol. 1517] By Mr. McVann:

(1047) In connection with the making of these figures I made a study of the tonnage originating in these districts and destined to northeastern Ohio. I have knowledge of the coal that moves to those destinations, with the exception of Akron, Ohio, which is not served by the Wheeling & Lake Erie, and a point where we do not have working arrange-

ments from these southern districts. But we haul a certain tonnage from these districts to the towns shown, with the exception of Akron; and I have noted the Ohio Bureau of Coal Statistics' statements by months showing the coal which moves from these various origins to various destinations, including Akron, and I would say that there is a substantial movement from these origins to these destinations. I did not make the observation of these tonnage statistics to state about what percentage relation the total of that tonnage has to the total tonnage consumed in this territory, but I observed that the heaviest tonnage to these destinations moves to Cleveland, the heaviest tonnage (1048) of these destinations, or from these groups. If you take the destinations mentioned in this exhibit, you will find that the greater volume of coal from these origin groups moves to Cleveland. I did not carry the matter far enough to ascertain what percentage that tonnage was of the total tonnage consumed in the destination territory mentioned. I have not definite knowledge enough of that to enable me to testify about it. That is in Exhibit 52 of Mr. Kern.

[fol. 1518] By Mr. Keeler:

When I said the new division was the same as the old division, I meant on a percentage basis. The per cents were not changed. Naturally the division in cents would vary with the measure of the rates.

By Mr. Henry C. Hall:

Respecting Exhibit 147, I said that I did not mention anything about the reasonableness of the rates stated on this exhibit. (1049) They are not intended to show the reasonableness of any rates or rate levels, but only to be representative of the divisions themselves.

[fol. 1519] (1050) B. F. Hoffacker was called as a witness and, having been duly sworn, testified as follows:

Direct examination.

By Mr. Martin:

My name is B. F. Hoffacker. I am an engineer and geologist, with offices (1051) in the Park Building, Pittsburgh, Pa.

I am a registered professional engineer in the State of Pennsylvania; and am a member of the Engineers' Society of Southwestern Pennsylvania and a member of the American Institute of Mining and Metallurgical Engineers.

My technical education was acquired at the Polytechnic Institute in Baltimore. I finished a post graduate course there in 1905 and started to work in the coal mines of Somerset County, Pennsylvania, that same year.

In 1907 I was employed by the H. C. Frick Coal Company, the coal operating subsidiary of the United States Steel Corporation. My duties there were as engineer and mine map draftsman and estimator of the unmined tonnages of coal at all the plants of that company.

In 1909 I went to Pittsburgh and was employed by John W. Boileau in preparing maps and data for coal rate cases, in the investigation of coal properties throughout the Appalachian territory, in drilling and prospecting coal lands for (1051-A) prospective purchasers or for companies which wanted them investigated.

I took over the business of Mr. Boileau in 1914, on his death, and have conducted that business under my own [fol. 1520] name since that time.

I have examined personally a great many of the mines in the Pocahontas, New River, Kenova, Thacker, Big Sandy, Harlan, Fairmont, Connellsville, Pittsburgh, Freeport and all of the Ohio districts.

The investigations conducted on the coal in these freight rate districts necessitated inspection of the mines located therein, with a view to determining the character and quality of the coal, the value of the coal for various uses, and also necessitated the drilling of various tracts of coal to determine that same factor.

(1052) Samples had to be taken and analyses made of the coal seams in all of these freight rate districts to determine whether or not they would be suitable for certain usage.

I have been conducting that work under my own name since the year 1914. I have been engaged in investigations of coal properties and in working in mines since 1905.

The coal in the Ohio No. 8 District is primarily a steam coal, used for commercial and domestic purposes. It is mined from several seams in the Ohio No. 8 District, including the Pittsburgh and the Middle Kittaning and Lower

Freeport. The coal is a rather hard, blocky, high volatile coal, and, as stated, is used primarily and particularly and practically only for steam purposes. By that I mean either on a commercial basis or by the domestic user. It cannot [fol. 1521] be used for either bee-hive or by-product coking, due to its high ash and high sulphur content, as well as its high oxygen content, and it cannot be used for illuminating gas purposes due to its high sulphur content.

(1053) The coal in the Moundsville Freight Rate District, which is part of the area of West Virginia known as the Panhandle District, is similar in quality to the coal in the No. 8 District, but I might say that it is slightly better from a chemical standpoint. In addition to being slightly better from a chemical standpoint, it is a few inches thicker than the coal across the river in the State of Ohio.

Proceeding east from the Moundsville territory through the Pittsburgh District, the Pittsburgh seam of coal continues to be operated into and beyond the City of Pittsburgh. It continues to increase in thickness and to become better chemically until it passes from a strictly steam coal type into what may be termed a gas coal type. It still retains its hard, blocky character, and is continually increasing by inches per mile in thickness.

Continuing east from Pittsburgh and southeast from Pittsburgh into what is known as the Connellsville Freight Rate District, the coal assumes a character which permits its use, first, as a high grade gas coal and then on into the old Connellsville Basin, where it becomes a bee-hive coking or (1054) by-product coking coal.

[fol. 1522] Generally speaking, the coals in the Connellsville and Pittsburgh Freight Rate Districts may be rated as coking, gas and steam coals, with the steam coals on the western edge of the field and the coking coals on the eastern edge.

In the Pittsburgh District there is also a development of what is known as the thick Freeport seam. This is the Upper Freeport seam, which assumes a thickness of twice its regular height. It, too, is used for gas, by-product and steam coal purposes.

There are also mined in the Pittsburgh District, at scattered points, certain areas of the thin Freeport seam of coal.

The coal in the Pittsburgh District lying to the east and southeast of the City of Pittsburgh is, generally speaking,

a gas type of coal of the very best. I do not know of anywhere in the Pittsburgh bed where the seam becomes lower in ash or sulphur than it does immediately south and southeast of Pittsburgh and northeast of Pittsburgh, speaking (1055) in terms of the Irwin Gas District, than is found in this territory. The contrast in these respects between such coal and the coal in the Ohio No. 8 District is so pronounced that almost everyone is familiar with it. Not only the physical character of the seam changes, but the chemical character of the seam changes in this district from the Pittsburgh seam in the No. 8 District.

I have included my observations of the coal in the Con- [fol. 1523] nellsville District in connection with my remarks on the Pittsburgh District.

Continuing south from Pittsburgh across the Pennsylvania-West Virginia State line, we come into what is known as the Fairmont Rate District. For bee-hive coking purposes, the best coal in the Fairmont District was never regarded as highly as the Connellsville Basin coking coal. For gas coal purposes, however, it is used at a great many points, and some very excellent by-product coal comes from one particular point in the Fairmont District, at a mine owned by the New England Coal & Coke Company. This mine produces coal as low (1056) in sulphur and ash as is produced by the average mine selling gas and by-product coal, in the Pittsburgh and/or Connellsville District. There is very little gas coal produced in the Connellsville District. One small part is all, you might say, that contains gas coal.

I consider the coal produced in the Fairmont District superior to the coal produced in the Ohio No. 8 District, because of the fact that it may be used for gas and by-product coking purposes, and on account of its analysis or its chemical character, if I may use that term. There is a difference in the B. T. U.'s between the Ohio No. 8 coal and the coals of the districts outside of Ohio to which I have so far referred. On an "as received" basis and using mine-run coal, the Pittsburgh seam coal from the No. 8 District [fol. 1524] will seldom exceed 13,000 B. T. U.'s per pound of coal. The coal from the Connellsville, Pittsburgh and Fairmont Districts will seldom go below 13,000 B. T. U.'s. It will range from 13,000 B. T. U.'s per pound up to 14,400

or 14,500 B. T. U.'s. The Ohio District No. 8 coal is the low B. T. U. figure (1057) coal, generally below 13,000 B. T. U.'s; sometimes above at a few particular points.

By the Fairmont District I mean that territory south of the Pennsylvania state line included in what is known as the Fairmont Rate District, extending down along the Monongahela River, through Fairmont, past Clarksburg and south, southwest and southeast to take in all the mines possessing the Fairmont District rate to destination points. I do not include in the Fairmont District what is usually known as the Gauley District of the B. & O., or what is known as the Bealington District. We go south into a portion of Taylor County (1058) and practically all of Harrison County, which are south, southeast and southwest of Clarksburg and include practically all of Marion County and practically all of Monongalia County, in what is known as the Fairmont District.

The coals in the territory known as the Kanawha and the Kenova Districts and the Thacker District and the Pond Creek District of Kentucky and the Big Sandy District of Kentucky contain a great variety of coals from a great number of seams. By "great variety", I mean that [fol. 1525] they contain thick coals and thin coals, with volatile contents ranging from 32 to 40 per cent. They are all generally low ash, high volatile, low sulphur coals, suitable for gas, by-product coking and metallurgical purposes, and are equally as good, in their best state, as the high volatile gas and by-product coal in the Pittsburgh District. Some of our very best coal, from an ash and sulphur content standpoint, comes from the seams mined in these districts. They are most certainly definitely superior to the Ohio No. 8 coal. That is also true in the matter of B. T. U.'s; (1059) due to their lower ash content, they at times outrank the Pittsburgh and Connellsville and Fairmont District coals in their heat value.

I would like to say that, if I failed to mention the steam uses for any of these particular coals, it is a well recognized fact that any good coal may be used for steam purposes. The poor grades of coal can only be used for steam purposes.

The McRoberts and Hazard fields and the Harlan field of eastern Kentucky contain coal similar to that produced in the Kenova-Thacker-Big Sandy Districts. In fact, some of

the seams are the same geologically as are mined in these last named districts. The only difference that I have ever been able to find in connection with some of these Kentucky coals is the lower fusibility of the ash as compared with some Pennsylvania and some Kanawha or southern West Virginia coals.

[fol. 1526] The coals mined in the so-called Outer Crescent or low volatile fields occur in two distinct groups; the so-called New River Group centering (1060) around Fayette County, West Virginia. The seams that are mined in this particular group are, first in importance, the Sewell, the Fire Creek and the Beckley. The Sewell seam of coal produces the best coal in America, on account of its ash and sulphur content. And I don't own any of it, either. I think there has been enough testimony put into the record here to verify that statement in the last 25 years, maybe not in this record, but in the Interstate Commerce Commission records.

The Outer Crescent coal is known as a soft, friable, at times coking coal; generally a by-product mixed coal, and always a superior steam fuel. They are extremely low in ash and sulphur as compared with coals produced commercially elsewhere, and consequently they are extremely high in B. T. U.'s or heat value in comparison with the coals produced in the districts heretofore mentioned.

The other low volatile coal district in southern West Virginia is what is known as the Pocahontas District. This coal seam produces a low volatile coal likewise, slightly lower in volatile content than that which is produced in the New River districts. (1061) The ash content is slightly above that of the best of the New River District coal. The seams producing the coal are the Pocahontas No. 3, first in [fol. 1527] importance; then the Pocahontas Nos. 5 and 6, and at places what is known as the Welch seam and the Iaeger seam.

The coals from this low volatile territory of Southern West Virginia are used for by-product mixtures. That is, a certain percentage—usually the smaller percentage—is introduced into the by-product ovens with other high volatile coals in order to either increase the structure of the coke being manufactured or to lower the ash and sulphur or to raise the fusibility of the ash in the coke, or for all of these purposes.

The Pocahontas coal likewise is a superior steam fuel. Both the Pocahontas and New River coals are used by the Navy for steam purposes and for their smokeless properties. The coal has considerable demand all over the North and Northwest as a high grade domestic fuel, where the customer does not care what he has to pay for a ton of coal delivered into his cellar. The superior characteristics of this coal as a domestic fuel are its low ash and sulphur content, its high heat value and its smokeless properties.

That concludes my discussion of the (1062) characteristics and quality of the coals in these various freight rate districts.

Referring to the statement of Mr. Sisler at page 503 of the record, in effect, that the physical and chemical charac- [fol. 1528] ter of the Pittsburgh seam is the same, or remains the same, throughout the territory in which it is found, I cannot say that that is true. The chemical character, if we mean by "chemical character" that which is developed by chemical analysis, is certainly entirely different throughout the territory in which the seam is mined. If, by "physical character" we mean the appearance, thickness and hardness of the seam, then that also is different throughout the entire territory in which the Pittsburgh seam is mined. I think the best coal in the Pittsburgh seam is in the vicinity of West Newton, in the territory from which the Pittsburgh Coal Company are now producing their coal; at West Newton, (1063) Pa., which is southeast of Pittsburgh 26 miles. I think West Newton is in the Connellsville District or in the Pittsburgh District. It is right on the edge. As to where the poorest part of the Pittsburgh seam is, from a chemical standpoint, you can always find poor coal anywhere. The difficulty is to find good coal. Some of the poorest coal I know of is found in the Ohio No. 8 District, and that is poor from the standpoint of heat value, sulphur and ash and moisture, which includes the oxygen content.

The Pittsburgh seam of coal will vary in thickness in Ohio, in the Ohio No. 8 District, from 4 feet 3 inches to 4 [fol. 1529] feet 6 inches, and will be found twice that thick in the Pittsburgh District. The appearance of the coal in the mines is entirely different. Anyone looking at the

face of the seam of coal in an Ohio No. 8 mine would know that he was not in the gas coal district of Pennsylvania. That is likewise true of the coal in the Connellsville Basin. The structure of the coal or the appearance of the coal is entirely (1064) different.

The statements of Mr. Sisler, to which I have been addressing my last few answers, occur (1065) at page 503, seventh line (reading): "The Pittsburgh coal bed decreases somewhat in thickness southwest of Pittsburgh, but its physical and chemical character remains the same, with the exception that the moisture content increases southwest of Pittsburgh into the Ohio No. 8 District." Farther on at page 503, line 12: "Because the same coal bed, with approximately the same chemical character, is the principal coal bed being mined."

It is in connection with that that the Witness Sisler says that geologically all these rate districts are practically identical. There is a similar statement made on pages 497 and 498 of the testimony. On page 498 (reading): "This"—and "this" evidently means a set of analyses previously referred to—"is to show that the chemical character of the Pittsburgh coal in all of these areas is practically identical, (1066) with the exception that the volatile matter increases westward and southward from the Meyersdale District in Pennsylvania and the Pittsburgh District also of Pennsylvania."

[fol. 1530] That simply bears out further the contention that I have been endeavoring to set forth here.

I have been in most of the mines along the river in the Pittsburgh and Connellsville Freight Rate Districts; and by "the river", I mean both the Monongahela and Allegheny Rivers. I have made mine maps of these mines and property maps of these holdings, and have been at them dozens of times in the past 25 years. I have kept myself familiar with them up to the present time; and I would like to qualify that by saying that I keep records of all of the mines in the five counties of (1067) southwestern Pennsylvania, namely, Allegheny, Fayette, Greene, Washington and Westmoreland Counties. I have been keeping an annual record of these mines and properties since 1912, in order to see who possesses them, what seam of coal they are working, how many acres and tons they may have left, what they produce annually, and what they exhaust an-

nually in acreage. As a result of the keeping of that data, I am familiar with the amount of available coal at these mines, their daily capacity and their annual production for the years 1926 to 1931, inclusive.

In the State of Pennsylvania, not later than February 1st of each year, all coal operators must report to the district mine inspectors the number of tons of coal mined during the preceding year, together with a lot of incidental data. This information is available to me. I secure it from the Department of Mines at Harrisburg, practically [fol. 1531] as soon as it is turned in. (1068) I utilize those figures, and I also utilize the figures turned in on the assessment books of the various counties in which the properties are located.

I have examined Exhibit 141, introduced by Mr. Durham in this proceeding, and the list of mines along the Monongahela and Allegheny Rivers equipped with river tipples is correct, as modified by Mr. Durham in his testimony.

I have caused to be prepared a statement entitled "Statement Showing the Available Acreage and Tonnage, the Daily Capacity and Annual Production of Mines Adjacent to the Monongahela and Allegheny Rivers; Mines Equipped with River Tipples for handling coal". I file it as Exhibit 148.

(Exhibit 148, Witness Hoffacker, received in evidence.)

I have divided or classified the mines shown on this exhibit as between commercial mines and captive mines. (1069) A commercial mine is a mine engaged in mining coal and selling it to anyone who may care to purchase it, in contradistinction to a captive mine, which is one engaged in the mining of coal for its own uses; that is, for the uses of its owners.

This exhibit sets forth the names of the mines, both commercial and captive; the names of the owners or operators; the available coal, in acres and tons; the daily capacity of [fol. 1532] each particular mine, and the production of each particular mine in the period 1926 to 1931, both inclusive. The mine numbers are shown at the extreme left and right of the sheet. They correspond with the mine numbers shown on Mr. Durham's Exhibit 141. On the Monongahela River the total daily capacity of the commercial mines equipped with river tipples is 21,300 tons. On the

Allegheny River (1070) the daily capacity of the commercial mine equipped with a river tipple is 2,000 tons. The daily capacity of the captive mines on the Monongahela River is 86,700 tons. The daily capacity of the captive mine on the Allegheny River is 4,000 tons. Making the total daily capacity of all mines on the Monongahela River 108,000 tons and of all mines on the Allegheny River 6,000 tons, or a grand total of 114,000 tons, for those mines equipped with river tipples for handling coal. I have excluded from this list all mines located on these rivers which are not at present equipped with river tipples for handling coal.

(1071) The mines producing steam coal only, and not suitable for other purposes, from commercial operations on the Monongahela River include Nos. 41, 42. As to mine 34, I would have to answer the question yes and no, as to that being limited to steam purposes only. It makes a heating coke from the coal at that time, but generally the coal is a high sulphur product. At Mine No. 34—Donald No. 2—the Whyel Coke Company coke the product and make [fol. 1533] a grade of coke suitable for domestic (1072) heating only.

Mines producing steam grade of coal only from captive operations on the Monongahela River would include No. 36. This is the Warwick mine of the Warwick Coal Company, a subsidiary of the Duquesne Light Company, of Pittsburgh, Pa. That is the only one at which I would say there was a steam grade of coal mined. There is some poor coal at the others.

The Shannopin mine can produce, from a section of their bed, coal of a high quality, but not from the entire bed. Now, it is a question whether the owners, Jones & Laughlin, will go to the extent of mining that certain section of the bed for metallurgical purposes, rather than just devoting the entire seam to their steam coal needs.

I would not include the Shannopin coal, although it is high sulphur and some of the highest sulphur along there. I do not want to include that as a steam-coal-only operation.

All of these commercial mines to which I have (1073) referred are engaged in the business of selling coal to the general public.

Any mines of the H. C. Frick Coke Company, located on the river or elsewhere, supply coal for the National Tube

Company at Lorain and the American Steel & Wire Company at Cleveland for by-product coking purposes. The [fol. 1534] daily capacity of the mines of the H. C. Frick Coke Company located along the Monongahela River totals 47,500 tons. That is the daily capacity of the mines located on the river and equipped with river tipples, owned by the H. C. Frick Coke Company. (1074) Every one of the mines shown on Exhibit 148 are mines in Pennsylvania. As to leaving the impression that none of these mines produce steam coal except Nos. 41, 32 and 36, I qualified that statement by saying that any coal produced at any mine is suitable for steam purposes. Certainly these mines produce steam coal. I said on the record that Nos. 41, 32 and 36 on this exhibit were those mines which produce coal suitable for steam purposes only.

I am familiar with the mines adjacent to the Ohio River in the territory between Steubenville and Powhatan, Ohio, and inspected such mines during 1932, in the month of December. (1075) I have checked the list of those mines on Exhibit 141 to verify its correctness. That list is correct. I include within the limits of Steubenville, Ohio, on the north, and Powhatan, Ohio, on the south, the mines on both the Ohio and West Virginia sides of the river.

The mines located between Steubenville and Powhatan, on both sides of the Ohio River, which are presently equipped to load coal into river barges, are as follows: Mine No. 208, known as the Warwood Mine of the Wheeling [fol. 1535] (1076) Valley Coal Company, located 2¾ miles above Wheeling, W. Va., with a daily capacity of 2,200 tons; Mine No. 206, known as the Alexander Mine, owned by the Glendale Gas Coal Company, a subsidiary of the Valley Camp Coal Company, with a daily capacity of 1,500 tons. There is one more mine known as the Panama and owned by the Ben Franklin Coal Company, located on the southern limits of the City of Moundsville, W. Va., No. 205 on Exhibit 141. That mine can produce 1,100 tons of coal. I believe it could load something less than 1,100 tons of coal, however, on the river.

There are other mines on the Ohio River between Steubenville and Powhatan, equipped with tipples on the river, which are not utilizing them for the dumping of coal into river barges. (1077) Opposite Mingo Junction, Mine No. 210, owned by the Pittsburgh-West Virginia Coal Company

and known as the Gilchrist Mine, has a tipple on the river, in a more or less state of repair, and from which coal is not being loaded. Its daily capacity is about 1,000 tons per day. Of the same class is the Shadyside Mine of the Cambridge Collieries Company, shown at the point marked "207". This mine is located approximately across the river from the Alexander Mine of the Glendale Gas Coal Company. It has a capacity of approximately 600 tons per day.

There is one other mine not shown on this exhibit, known as the Clifford Mine of the Central Mining Company, which has a tipple on the river, and which tipple is not in use. It [fol. 1536] has a capacity of approximately 750 tons per day. That is north of the point marked "207", about 4 miles below Shadyside. The Shadyside mine is not in operation at present.

(1078) I am familiar with the plants of the Pittsburgh & Lake Erie at Colona, Penna., and of the Pennsylvania Railroad at Conway, Penna., for the transfer of coal from the river barges to railway cars. I inspected the plant of the Pittsburgh & Lake Erie about the middle of 1932 and the one owned by the Pennsylvania in December, 1932.

The plant owned by the Pittsburgh & Lake Erie Railroad Company for the unloading of coal from barges to railroad cars, located at Colona, is a very modern, up-to-date plant, capable of hoisting from 450 to 500 tons of coal per hour, and by hoisting I mean transferring that number of tons of coal per hour from barges on the river to railroad equipment on the tracks at the hoist.

The plant owned by the Pennsylvania at Conway is really a (1079) makeshift plant, but it has the facilities for hoisting from 150 to 200 tons per hour; at least, that is the designed capacity of the plant. It consists simply of what is known as a whirler type hoist electrically operated, handling a three-yard bucket on a 50-foot beam. The plant in no way compares with the installation of the Pittsburgh & Lake Erie, and I do not want that to be considered as a [fol. 1537] reflection on either one or the other. The Pittsburgh & Lake *Lake* Erie plant has several times the capacity of the capacity of the Pennsylvania Railroad plant, and several times the cost, I would say.

By Mr. Ballard:

The Cambridge coal is in the Cambridge district, south of and adjoining the middle district. That is what we call the Cambridge rate district (1080), and is the upper Freeport seam of coal, and is better in quality than the Pittsburgh seam mined in the No. 8 district. It is lower in sulphur and ash. We are speaking now of the average of the two fields rather than the analysis that might come from any particular operation. In fact, analyses from particular operations can disprove most any statement that is said or that has been said here today. It is used for general steam coal purposes, and I understand at times it has been used for producer gas. The use of coal in northern Ohio for illuminating gas, that is, gas made by the retort system, is rather limited. The Cambridge coal might be used under a laid-down price factory for gas production by either the retort system or by the use of producers or by a water gas set. They at times make water gas by the use of bituminous coal.

An average as received analysis of the Pittsburgh seam of (1081) coal from the No. 8 district for mine-run coal would be approximately as follows: Moisture 3 per cent; [fol. 1538] volatile matter, 39 per cent; ash, 8.25 per cent; fixed carbon, 49.75 per cent; sulphur, 3.25 per cent. The B. T. U. content of such a coal would be in the neighborhood of 13,000, plus or minus. Moisture, volatile matter, ash, and fixed carbon, should always add up to 100. The sulphur is taken separately. The range of volatile matter in No. 8 coal is from 39 to 41.

By Mr. Bronson:

The figures for the Cambridge district would be ash, 7.50; sulphur 2 to 2.50. (1082) The moisture is approximately the same, 3 per cent. Volatile is about 38.50. Add them up and subtract from 100 and you will get the carbon. The range of volatile matter is practically the same for No. 7 seam mined in the Cambridge district as it is for the Pittsburgh seam mined in the No. 8 district, 38½ to 41. The B. T. U.'s consequently would be a little in excess of 13,000, due to the fraction of a point lower in ash. When I talked about No. 8 coal that was the No. 8 coal in the Ohio No. 8 district, that is, the Pittsburgh seam. They call this seam No. 8 in deference I suppose to the district.

By Mr. Ballard:

(1083) The fixed carbon in the Cambridge coal is 51 per cent.

I could give a corresponding analysis for coals from the other districts, Pittsburgh, Connellsville, Fairmont, and so forth. I have about 25 years collection here. I do not know [fol. 1539] whether they would mean anything to you if I gave them. I can give them, Mr. Ballard, for any district, and, as I have said heretofore, a general average analysis for a district will be higher or lower, naturally, than for any particular mine within that district. That is true generally of any district. You can find some particular mine where the coal is in a more pure state than it is in some other particular mine. I hope these analyses I have given are the standard coal for each district, and I am giving them to you as such. I am not a coal salesman, I am not trying to sell something here today, I am trying to set up a picture of what we have in these various districts.

(1084) The Pittsburgh analysis would run from the analyses given for the No. 8 District for the Pittsburgh seam, down to 1 per cent moisture, 32 per cent volatile, and 5 per cent ash. That will leave 62 per cent fixed carbon, and down to minus, or less than 1 per cent sulphur for the best coal in the district.

(1085) Connellsville analysis will show 1 per cent moisture, 29 per cent volatile matter, 7 per cent ash, and we will still claim 1 per cent sulphur. That will be 63 per cent fixed carbon. That Connellsville should be defined more closely. When we speak of coal from the Connellsville District we generally regard it as being coal from the old Connellsville basin, and that is higher in ash due to its being stumps and [fol. 1540] ribs. In the Connellsville freight district, along the Pittsburgh & Lake Erie Railroad section of it, there is coal which will be at a variance from this in both the volatile matter and the ash. The sulphur will be about the same.

That same thing will hold true on the Monongahela River in the Connellsville district. The Connellsville district of the Monongahela River includes the mines in what is known as the Klondike and in the Washington section and the Greene County sections below Millsboro, and there is some very excellent coal mined in that section of the Connellsville district, the volatile content being higher than in what is known as Connellsville (1086) basin coal. This

analysis of 1 per cent moisture, 29 per cent volatile, and 7 per cent ash, pertained rather to the Connellsville basin, the good coal in the old Connellsville basin.

The Connellsville freight district embraces coal on the Monongahela River in Greene County and Fayette County, and coal along the Youghiogheny River in Fayette County. It embraces all the old Connellsville basin coal south from Hunker, Pa. If we start to ramify around here on analyses we will have to be a little more specific, and in being a little more specific, we will have to be still more specific. I can fill the record with analyses if you want them.

I have already stated that when you come right down to it, these analyses which I may give for a certain district, [fol. 1541] I may find when I get to another mine in the same district the analysis of the coal is entirely different.

By Mr. Day:

As to my description of coal produced in what I call the Connellsville freight district being rather vague and fragmentary, I will give that specifically and definitely. (1087) You ask me about some specific point in the Connellsville district where you want an analysis and I will endeavor to give it to you. The old Connellsville basin is an integral part of the freight rate district. If you want an analysis of other coals in the Connellsville district I can give it to you by mines or points or townships or counties, or what have you. I get that information by having the analysis made under my supervision, by my taking the samples myself in the mines and by checking up with others who do such work. These figures I have are not taken from the Pennsylvania Bureau of Mines' reports. The Bureau of Mines' reports and general information is something that I would rather steer away from. (1088) I can give you an average for the Connellsville freight rate district, for the portion of it lying in what is known as the Klondike basin. You must understand that the Pittsburgh coal in the Connellsville freight rate district covers two separate areas, one of them being what is known as the old Connellsville basin and the other being what is known as the lower Connellsville or Klondike basin, and that Connellsville district [fol. 1542] rate has been extended further to include mines within the State of Pennsylvania in Greene County and Fayette County as far south as the Pennsylvania-West

Virginia State Line. In that territory there is coal being mined suitable for gas and by-product use. It is not true that there is such a variety of coals in the Connellsville District I would have to take each mine separately or each area separately. If you will let me proceed, I will give you some analyses for the Connellsville District in the territories that I have just enumerated.

(1089) The Pittsburgh seam of coal, as mined in the Klondike district of the Connellsville freight rate district, will carry the following analyses: Moisture, 1 per cent; volatile matter, 34 per cent; ash, 8 per cent to 7 per cent; fixed carbon, 57 per cent to 58 per cent; sulphur, 1 per cent. The B. T. U. will run around 13,500 per pound of coal. (1090) That is practically the same as for the old Connellsville basin coal I gave a while ago.

As to my figures as to the Connellsville freight rate district being confined to what I describe as the Klondike—don't you be concerned about the Connellsville district in my analyses. I can give it to you by any portion of it, if you will just be specific enough in asking the questions as to the district. The reason for being so specific is because the Connellsville district covers a wider range of coals in volatile matter, and ash, and moisture. All of the [fol. 1543] Connellsville coal is classed as by-product and may be used for steam coal, and the poorer grades are used for steam coal.

By Mr. Ballard:

(1091) The average analysis of mine-run coal in the Fairmont district of West Virginia is: Moisture, 1.50 per cent; volatile matter, 35 per cent; ash, 7 per cent; fixed carbon, 56½ per cent; sulphur, 1 per cent to 1.5 per cent, and B. T. U.'s 13,500 to 13,700.

As to southern West Virginia, I will have to give you a range there because the same thing occurs there that occurred in the Connellsville district. A range is necessary to set forth the chemical character of the coal. Moisture, 1 per cent to 1.5 per cent; volatile matter, 32 per cent to 40 per cent; ash, 4 per cent to 8 per cent. If we add those up and subtract from 100 we will get that ascending or descending range again. We will have 55 per cent on the high volatile low ash to 63 per cent on the low volatile low

ash. (1092) And the other end of the range is 50.5, if your addition and subtraction is correct. 32 per cent to 40 per cent is the range across the Kanawha, Thacker and Kenova districts, and that will continue across the Tug River into Pike County, Kentucky, and into the Big Sandy districts. There is quite a spread of volatile content in those southern West Virginia and eastern Kentucky high volatile coals. They are universally low in ash and sulphur and are regarded as very high-grade metallurgical coals. The sul- [fol. 1544] phur content of 1 per cent to 1¼ per cent will cover thousands of sections, and 14,250 B. T. U. for the low ash, and for the high, 13,750 to 14,500. (1093) For the southern low volatile, New River, Sewall seam, mine-run basis, moisture 1 per cent; volatile 22 to 26 per cent, ash 4 per cent to 6 per cent; fixed carbon, 73 per cent to 67 per cent; sulphur always below 1 per cent. It is rare to find a high sulphur analysis in the New River coals. The B. T. U.'s would be 14,500 to 15,000. The Sewall is the best of the three mined in that section, and the Fire Creek and Beckley, which are the other two, are but very little lower in heat value, and I suppose that is what we are trying to arrive at here, anyway. They would be within the range of the figures I have just given.

By Mr. Webber:

When I was speaking about the Fairmont district, giving my average analyses, which were 1 to 1.5 per cent sulphur, I included the good area known as the Farmington-Barricksville-Fairmont section. In that I did not give as low an analysis for ash as is contained in the best Fairmont coal. (1094) There is a section running from the Kingmont mine and the Monongah mine through the Barracksville mine, through New England No. 1 and Jamison No. 8, which contains the best coal in the Fairmont section, or the Fairmont district, rather. The coals from other sections of the Fairmont district will range up to 2½ to 3 per cent in sulphur.

[fol. 1545] Cross-examination.

By Mr. Bull:

The mines I have been mentioning are in Marion County, West Virginia, surrounding the town of Fairmont, West

Virginia, at various mileages. The Ohio No. 8 district includes parts of Harrison, Jefferson, Belmont, and Monroe counties. I think the Middle Kitanning seam is mined in Jefferson County or Harrison. I would have to refer to a map to give it to you. The lower Freeport seam is mined on the river at Steubenville, which would be Jefferson County.

(1095) I do not know what percentage of the total production of what I have described as the Ohio No. 8 field comes from the seams in question, but there are six important mines mining those seams of coal in the No. 8 district of Ohio. I have no idea what part of the total it is. The part of the total from the lower Freeport is a minor portion. I cannot give you the facts unless I make further investigation, if you want to hold down to thousands of tons and hundredths of per cent. To my knowledge I believe there is one mine working two seams of coal in the No. 8 field. I believe it is Nelms mine. (1096) I said in the record this morning that the seam is either the lower Freeport or the middle Kitanning. It is difficult to distinguish them and I do not believe the owners know themselves, because I asked one of them the other day and he said he could not tell. (After examining papers.) Now we will clear up this question about the county and the [fol. 1546] seam and the capacity. The Ohio & Pennsylsylvania Coal Company at Nelms, Ohio, Jefferson County, mines what is reputed to be the Middle Kitanning. They have a capacity of approximately 3,000 tons per day. They are also mining this seam at Bergholz in their Rice mine; at least, it is reported as the same seam. (1097) The capacity of that mine is 1,750 tons, and it is located in Jefferson County.

I would say those two mines are very important mines compared with any in that district. The only mine that exceeds them is Powhatan mine at the lower end of the No. 8 district. A 3,000-tons a day mine in the No. 8 district is some mine. They are not located on that map (indicating). I can show them to you. (Discussion off the record.) In my discussion off the record I stated that the Nelms mine is near Kenwood, and the Bergholz is in the Middle and not in the No. 8 District.

By Mr. Orcutt:

Referring to Exhibit 148, Section B, the list of captive mines other than those owned by the H. C. Frick Coke Company, (1098) would be No. 2, National No. 4, National Mining Company, United States Steel Corporation subsidiary; No. 6, Pittsburgh Steel Company; No. 10, Jones & Laughlin Steel Company; No. 21, Wheeling Steel Corporation; 10, 18 and 22 are all Jones & Laughlin; 27, Crucible Steel Company or Corporation; 28, Weirton Steel Company; 32, Youngstown Sheet & Tube Company; 35, Pittsburgh Steel Company; 36, Duquesne Light Company; 40, Jones & Laughlin Steel Corporation; No. 1 on the [fol. 1547] Allegheny River, Wheeling Steel Corporation. None of those proprietary interests, outside of the United States Steel Corporation, have operations of plants in the Cleveland district.

The limit on the list to mines equipped with river tipples, was set forth because we did not want to say that there was too great a capacity to load on the river, and (1099) we only used those mines that had river tipples. There might be a question as to whether mines not equipped with river tipples could cross the lines of the Pennsylvania and the Pittsburgh & Lake Erie Railway to get to the river in order to load thereon.

I indicated in my testimony in the so-called Ex-River Case, I. & S. Docket 3619, that there were many mines along the Monongahela River situated in such close proximity to the river that by the erection of some simple river tipple they could utilize the river. There are not twice as many so situated as I have shown on my Exhibit 148. The available coal and daily capacity of mines adjacent to the Monongahela River, not equipped with river tipples for handling coal is as follows: Available coal, 192,458,000 tons; daily capacity 17,500 tons. (1100) That is in Pennsylvania and includes the mines in West Virginia as far as Mona, which is close to Morgantown, West Virginia. Whether that is the end of navigability of the Monongahela River will depend on what we mean by navigability. You could not get a standard barge, fully loaded, past the [fol. 1548] Morgantown bridge at the present time. There is only about six feet of water in the pool at that point, and a standard barge fully loaded will draw approximately

9 to 9½ feet. So, we would have to use non-standard size or insufficient loads to clear that point. There is nothing being done at the present time to put the river in condition to transport barge coal above that point. I believe plans are under way to make it navigable to Fairmont.

The mines shown on my Exhibit 148, supplemented by the additional mines located on the river but not having a river tipple, by no means represent the entire available coal or the entire daily capacity of the region about which I have been talking. (1101) In the five counties of southwestern Pennsylvania, in which territory are included the Pittsburgh and Connellsville freight rate districts, there are, as of January 1, 1933, 360 coal companies, and 450 mines producing coal from several different seams. Those mines would have a capacity of not less than 300,000 tons daily, because in 1931 they produced some 76,000,000 tons of coal, and, using a 250-day year, would give that result. There are some of those mines within the Pittsburgh and Connellsville freight districts, and there are some mines without those districts, and I cannot separate them without sitting down in a corner somewhere and going over the list mine by mine. I have the capacity here in these records of every mine in the five counties of southwest-[fol. 1549] ern Pennsylvania, together with the seam that it works, the acres remaining, and their last five years' production. That naturally includes mines on the Youghiogheny River. (1102) I can furnish the total available coal in acres and also in tons for all of the five counties about which I have been speaking. I have them for every mine and it is a matter of adding up some 400 and some figures, that is all.

(It was thereupon agreed that the witness would later supply said information)

(1103) In the so-called Ex-River case, I. & S. Docket 3619, I referred to gas coal and by-product coal, and said as to the differentiation I was relying more on its uses than I was on the analysis, as I believed that was a better test. That is still my opinion.

Referring to Mr. Durham's Exhibit 141, going south on the Monongahela, I cannot agree it is true that most of the

coal mined north of a point between mines No. 8 and 9 is used for gas and steam purposes regardless of what their analyses may be. Mine No. 2 is National No. 4 mine (1104) of the National Mining Company. They are not mining anything there at this time. I cannot agree with the statement that when it was mined it was generally used for steam or gas, because I *did* never did know where the production that came from National No. 4 went. If it went to Clairton it was certainly used for by-product purposes. If it went to some other point it could have been used for any other purpose.

[fol. 1550] With reference to mine No. 3, which is the Monongah Mine of the Pittsburgh Coal Company, I stated at page 330 of the record in I. & S. 3619 that that coal was used for gas purposes when it was mined. It has not been operated for six or eight years. That does not change the analysis or use of the coal. Mine No. 4 is the Black Diamond Mine of the Pittsburgh Coal Company. When it was mined in the old days it was used for gas coal purposes, for illuminating gas coal purposes. That business is a thing of the past now. (1105) As to No. 5, the Ella Mine of the Hillman Coal & Coke Company, I stated at page 332 of the record in I. & S. Docket 3619 that that coal was classified as a gas coal; that is still true. On the same page I stated the same thing about the Iron City Mine of the Monessen Coal & Coke Company, which is Mine No. 6; that is still true. I stated the same thing as to the Charleroi Mine of the Youghiogheny & Ohio Coal Company, Mine No. 7, and also as to the Naomi mine of the Hillman Coal & Coke Company, which is Mine No. 8 on Exhibit 141. It is true that beginning with Mine No. 9, and continuing south to and including Mine No. 35, that coal is generally and almost exclusively used for by-product purposes, with one or two minor exceptions. It is correct that beginning with Mine No. 36 and going south to the Pennsylvania line, most of that coal is used for steam purposes.

(1106) It is correct that the mines I have not shown on my Exhibit 148, i. e., the Geneva Mine, Poland No. 3, Dun-
[fol. 1551] kard, Moffitt, Walnut Hill, Maiden, Mina, Eureka, and Mona mines, produce and ship coal for steam purposes exclusively, with the exception that the Geneva mine coke part of their output.

Referring to the mines on the Ohio River equipped with

river tipples, the Powhatan mine has no river tipple. Above Wheeling there are two Constanzo operations; one, Wheeling Coal Company; one Wheeling Valley Coal Company. The Richland mine of the Wheeling Coal Company has a river tipple. (1107) I stated this morning there were several river tipples on the Ohio side of the Ohio River in Ohio No. 8. Shadyside and Fort Pitt do not have a river tipple. They can load coal on the river with the aid of a chute. The Constanzo operation on Exhibit 141 is just above Wheeling at the point marked 208, and that is the one I referred to this morning. Incidentally, they are loading considerable coal there. They loaded the first coal that went through your Conway hoist.

Low volatile coal is produced in Pennsylvania but none in Ohio. As to some good coal being produced in Ohio No. 8, there is some good coal produced everywhere, depending on what you mean by the term "good". There is also some poor coal produced everywhere; that is like poor relations; they are everywhere. (1108) If you want to take the best coal of Ohio No. 8 and the poorest coal in the Pittsburgh district, it is a fair assumption to make that some coal pro- [fol. 1552] duced in the Ohio No. 8 is superior to some produced in the Pittsburgh district.

By Mr. McVann:

I have spent some little time in the New River district, especially in the mines of the New River Company. They mine the Sewall seam of coal almost exclusively. They are an up-to-date organization, producing a high-grade of Sewall coal, and, as I say, the volatile content in that coal will range from 22, down on the Cranberry side, up to 26 in the Lochgelly-Summerlee side. When you get to the upper end of the field, around the Babcock operation that volatile content is 26. (1109) If I said 21 per cent or 22 per cent, there is no such thing as a standard percentage for volatile content. In the New River district you have three seams of coal and the variation may be from 20 to 27. I was not undertaking to explain particularly the operations of the New River Company, but all that field there. The Sewall seam is a peculiar seam of coal in its volatile content. On up into what is known as the Bergoo District, it climbs up to 29 and 30 percent volatile, the same seam that is 21 and 22 per cent in the New River. I believe there would be

something in the New River district which may be below 20 or 19. That would depend a good bit on the method used by the chemist making the analysis. Generally speaking, neither the Fire Creek nor the Beckley are as good as the Sewall. The Sewall was the first seam worked, and it [fol. 1553] was a wonderful seam of coal. (1110) The Fire Creek and Beckley were after-thoughts. As the operators got in there and developed the field and found these other seams of coal they worked on them and produced a smokeless or semi-smokeless type of coal. The Fire Creek and Beckley seams will follow along in the different basins with the volatile content of the Sewall seam. The volatile content depends on the distance from the southeast to the northwest. As you get close to what is known as the Allegheny front your volatile content is low. As you get away from that you get up to 40 and 45 per cent volatile content. The volatile content is lowest on the southeast side of the Appalachian field and highest on the northwest side. The basins run northeast and southwest, and in similar basins similar volatile contents will be found. That is to say, in a similar basin the volatile content of Sewall, Fire Creek and Beckley should be the same. In my observation they are the same. They should be the same. The volatile content of overlying and underlying seams generally agree with the basin that they are in. There are (1111) exceptions to all rules.

I admitted this morning the Sewall coal was, in my opinion, the greatest coal in the world. I claim that Fire Creek and Beckley are not as excellent fuel as is the Sewall seam. That, too, may depend upon a local condition. I have seen Fire Creek coal, in West Virginia, that was so good it was unbelievable in the analysis. Now, if we want to take up [fol. 1554] the time of this Commission in delving into little spots of good coal and bad coal and indifferent coal, I think it is out of order.

My recollection of that investigation is that the Beckley seam occurs in the Cranberry section of the New River properties. I cannot say it is minable coal. I would not want to make a statement unless I could refer to a record which is not here. (1112) I cannot make the statement as to whether the Beckley around Cranberry on the New River property is being mined.

By Mr. Day:

The B. T. U. for the Pittsburgh coal will run from 13,000 to 14,250. That will include both Pittsburgh and thick Freeport seams. Excluding the Freeport seam would not tend to raise those. There is very little difference in the chemical analyses between the thick Freeport and, we will say, the Pittsburgh seam. 13,000 to 14,250 would be a fair average of the coal. 13,000 would be the top for Ohio coal, taking the state as a whole. The good coal in Ohio is gone. The best coal in Ohio was in the Massillon district and in the Jackson-Wellston. There is no more (1113) of it, and you cannot get any more, and that is too bad. I would not say 13,000 would be the maximum because you might develop some mine that would produce something around 13,500; but 13,000 B. T. U.'s for Ohio coal is a good fair average heat value. The analysis of moisture will depend on particulars. If you load a carload of slack and ship it to Cleveland you might [fol. 1550] get 10 per cent moisture. You might load a carload of slack and ship it to Cleveland and have 3 or 4 per cent moisture. It depends on the weather. If coal from the Pittsburgh district was shipped the same day and had the same amount of rain and was the same coal it would be affected similarly. The average moisture content for coal in the state of Ohio will be around 4 per cent. (1114) That will be a low average. As against 1 per cent for the Pittsburgh district for the same kind of coal. The Ohio coals contain an excessive amount of oxygen which produces a high moisture content in any analysis that you may make of the seam. I can give you the ranges. I have got them here, if you want them. Ohio has 11 seams of coal in it. I have here in front of me the average moisture content for the average analysis for all the seams, all nine of them in the State of Ohio. (1115) I have said that a fair average, one that will be low, for the State, would be 4 per cent. It ranges from 3.45 to 9.86 for the state of Ohio as a whole, for all the seams. That is the moisture content driven off at 220 degrees Fahrenheit. As in the case of the other districts, they are air dried samples. The question started as an as-received mine-run basis. I am giving the same sort of figures as I did for all the others. The volatile content will range from 36 to 40 per cent. I have not the average; you had better put the average as 38.50. (1116) In the ash

[fol. 1556] analysis we will have to exclude the very good coal which is not available any more, which had 4.5 and 5 per cent ash. We will have to exclude it. It is not available. You cannot produce it. There was no non-available coal to exclude in the other states or other districts. (1117) Ohio has the reputation of practically working out two well-known coal districts, and they were the very best coals, and that was the reason why they were worked out. I would say a fair average for the State of Ohio is from 7.5 per cent ash to 8.5 per cent ash. There are a great many factors that enter into ash, sulphur, and volatile content. If you will add that moisture and volatile content and the ash content and subtract it from 100 you will get the fixed carbon. About 50 per cent is a fair guess. The range of the fixed carbon would be 45 to 50 per cent. Sulphur is higher in comparison with other districts. The only low sulphur coal we had is in the Jackson-Wellston and the Massillon districts, and the coal is gone. The sulphur in the other coals will run from 2 per cent up, and 2 per cent is not available in many of them.

(1118) When I referred to the good coal in Ohio being worked out, I had in mind the Jackson-Wellston district, that was the No. 2 and the No. 1 coal. There is one little mine up there owned by the Jackson Iron Company in that section that is now operating, but it is a very small affair. That is a special purpose coal, and it always brought about three [fol. 1557] times the average mine price of the other coal.

There has been some coal used from the State of Ohio for the manufacture of illuminating gas, but I do not believe today the average illuminating gas plant, if they are buying any coal at all, would buy Ohio coal. The manufacture of illuminating gas in Ohio is not at a very high point in these days. There is so much natural gas and so much coke oven gas and so many city ordinances preventing the blending of the one with the other that retort gas or illuminating gas is not a very great industry any more in the State of Ohio.

I testified I was familiar with the Nelms mine and its production. I made a mistake and corrected it on the record as between the two districts, if that is what you are trying to prove here. (1119) I have also been at the Rice Mine and the Bergholz Mine; I did not go down them. The analysis of Nelms Mine coal was very much superior to the No. 8 coal generally. I have already stated that that is one of the lar-

gest producing mines in the No. 8 District. In places the seam is seven feet and in other places it is seven inches. It was a little unfortunate, but they still produce a very high-grade coal there. I am not familiar with the Bergholz mine and its coal, except that I understand they produce the same type of coal there as at the Nelms Mine.

(1120) My statistics are not contained in any Government publication until they are on record here. Some of the data [fol. 1558] here as to the analyses of the different coals is in Government statistics (1121) and in public documents available to any one. I have certainly checked those statistical statements with my figures. If they did not agree with them, I would not have given them here. I do not have any reference to the number and description of the Government's publications. I secure them as they are published and daily use and daily reading of them and constant use of them makes one familiar with the analyses of coal from a certain district without knowing the number of the bulletin or the day and year in which it was printed.

I am familiar with the Sewickley vein in the Pittsburgh district. The only mine operating on the Sewickley seam in the Pittsburgh district is using it for steam coal purposes. There are a few small operations around Uniontown, Penna., which produce (1122) a limited amount of this coal, and it is also used solely for fuel purposes. The Sewickley seam extends into the Fairmont district; that is where it attains its best development. I would say it is used there exclusively for steam purposes, if you mean by that railroad fuel and general steam purposes.

I gave the fusing temperature of ash on southern coals. The range in Pittsburgh will be from 2,400 degrees Fahrenheit to 2,650 degrees Fahrenheit; that will include the Connellsville district. The Connellsville district in one or two points will run up to 2,800 degrees, but 2,650 degrees for so- [fol. 1559] called high-volatile coal is good enough for all practical purposes. The Fairmont coal will run about 300 degrees Fahrenheit lower than the Pittsburgh average, (1123) 3,200 to 2,450, except in probably some isolated case where a very high fusion ash is the property of the coal. No. 8 is low; 2,000, low, and 2,400, high, would be the range for the coals in the No. 8 and Middle Districts. I include No. 8, Middle and Cambridge in the 2,000 to 2,400. 2,500 degrees Fahrenheit for the Cambridge, and 2,200 for Pittsburgh and

down to 2,000 for the Pittsburgh. I am not changing the figures I gave. I am only changing Cambridge, making it 2,500 for Cambridge, and 2,000 to 2,400 for the Pittsburgh seam in the No. 8 District. The Middle District would be the same as No. 8 where it is mined in the Pittsburgh and the same as Cambridge where it is mined in the Cambridge seam.

(1124) Of the coal produced in the southern Ohio fields, Pomeroy is a very poor grade of coal. That is the Redstone. The Hocking coal is a very good grade of coal. I will say it is superior to No. 8. There is a thick Hocking and a thin Hocking territory down there. The Hocking coal gets poorer in quality as it approaches the Crooksville district and it gets still poorer in quality as it goes to the top end of the Crooksville district. I have in mind the stripping plant up at Ellis. Probably the heat value there is the same as No. 8. The stripping coal mine in the Crooksville territory [fol. 1560] will run around the same heat value as the No. 8. I am not judging the entire Crooksville section from my knowledge of the coal produced in the stripping operation; that is not the only knowledge I have of the Crooksville district. (1125) I simply cited that as a sample. I said that the lower end of the Crooksville district was better than the upper end.

Referring to my Exhibit 148, I show under the heading "Daily Capacity" 21,300 tons total for the Monongahela River Commercial Mines. That is the total mine capacity.

Referring to No. 13 Pike Mine, the Hillman Coal & Coke Company, I show *a daily capacity* of 1,000 tons per day, yet for the year 1926 production was 509,453 tons. That would not indicate 509 working days were used in the year or anything of the kind. My capacity figures are rated on the day these exhibits were prepared (1126) and not on a year five years ago in which a certain production was made under possibly forced pressure or some other thing. The daily capacity figures fluctuate from year to year, certainly. As to what day this particular exhibit was prepared, you may date it as of today. One thousand tons a day is the daily capacity of the Pike mine. The tipple has been burned down and has been recently put in, and there are only 190 acres of coal today. As to only showing 161 in the exhibit, they probably found some acreage in there that somebody else had. The exhibit is not defective; it is the best set of records I can compile for you or anybody else. As to the

[fol. 1561] daily capacity of 1,500 for No. 2, National No. 4 mine, under the heading "Captive mines" and the yearly production of 782,067 tons, the capacity set forth for these mines is based on what the mines might be expected to (1127) do today. I said you could establish the figures on this Exhibit 148 as of today. The figures were brought up to date as of November of this past year. I did not then have to ascertain that the production of the Pike No. 13 mine was 1,000 daily capacity, and the National No. 4 was 1,500 tons capacity; I knew what it was. The capacity set forth against those mines are what the mines may be normally expected to do within this coming year or within a certain portions of this year. (1128) The capacity of these mines is based on the ability of the mine to produce the number of tons set forth against each one of them. If the mine could produce a much greater production in 1926, there are several good reasons why it can produce only 1,000 tons during the year 1933. The principal one is that during the year 1926 and the subsequent years there have been a considerable number of working places lost in the mine through the mining of the coal. The production of a year like 1926 has nothing to do with the capacity of the mine as set forth here under the list of daily capacities. With reference to the Pike Mine I said that the acreage was about 190. (1129) I did not even look at the figure to see whether it was 190 or 160 or what it was. I said they might have found additional acreage since that time. The correct [fol. 1562] figure is the figure set forth on the exhibit. If there is any difference between the figure set forth and what I gave I said they found additional acreage. It seems to me you are just trying to be captious concerning the few acres that a particular mine has. There are several thousand acres set forth in the list. Whatever is set forth there is the correct figure. (1130) I said it was about 190 from memory.

The acreage and tonnage was omitted in No. 18, Vesta No. 6, Captive Mine, because it was included in another mine owned by the same company. Of necessity I must show the daily capacity and production. There is no duplication in figures. The acreage is owned by the one company and it is listed under the one mine instead of spreading it over three or four, and the daily capacities are set forth against each mine. The acreage back of Vesta No. 4,

5 and 6 is one body of coal. All the mines are working into this same coal and it is simply a matter of taking the coal and checking it to the three or setting forth the proper acreage against one of them. The net result is the same either way. (1131) The production of each mine is set against that particular mine. There is no duplication of the production figures.

By Mr. Webber:

In Exhibit 148, the first section, it is correct that that includes all of the mines on the Monongahela and Allegheny adjacent to the rivers which are equipped with tipples for [fol. 1563] handling coal. That applies to either the commercial or the captive coal mines. The statement on the top under the heading of "Commercial Mines" includes all of those that are today equipped and on the Monongahela River, in Pennsylvania. That is not correct outside of Pennsylvania. I mean it does not include any mines outside of Pennsylvania. You see, these commercial mines, (1132) under the heading A from Mongah to Moffitt are mines on the Monongahela River within the State of Pennsylvania, both in the Pittsburgh and Connellsville freight rate districts, equipped with river tipples. There are no commercial mines loading coal on the Monongahela River with regular equipped tipples south of the state line, that is, between the Pennsylvania-West Virginia State Line and Fairmont. There may be some makeshift equipment to put coal into a barge, because that has been done in the past at one or two points, but speaking of it in a commercial sense there are no river tipples between the state line and Morgantown. There are rail mines along the river. I just cannot remember when the last barge shipment was made up there, but it was quite a number of years ago.

In December I was down and made inspections of these various facilities on the lower river, and within the past year (1133) on the upper reaches of the Monongahela River. That inspection included all of these mines that are shown under commercial mines. We took the Government boat at Lock No. 4 and went up the river all the way to [fol. 1564] Fairmont and made an inspection for the U. S. Engineers of the river equipment and the facilities for loading coal in the upper pools.

Whatever I have set against the commercial mines on

the Monongahela is correct. If they are idle in 1931, then that is correct for that year. The two set forth as idle under 1931 were not working in 1932. The Pike tipple burned down in the early part of 1932 and it is not in position to ship at this time. They ought to be able to ship any day, but we will call that idle in 1932 if you care to. The other mines were all producing coal in 1932, to the best of my knowledge, except Pike, Mongah, and Thompson No. 1. I have not got the 1932 production figures. (1134) They will not be available until this next year. They would give the production, and that is the reason it is not put on here. We cannot go more than a year back. But, of the three mines that I have mentioned, they were idle during 1932. They were not shipping by river or rail if they were idle. The balance were shipping either river or rail. As to those that were not idle in 1932, that were producing coal, they were shipping by river or rail.

I was at Colona in 1932. I had some people down there inspecting that equipment there, some possible users. I was there once, sometime in May of 1932. The machine was not in operation during our visit there and no shipments had been made up to that time. (1135) I was at [fol. 1565] Conway in December of 1932. The machine was not in operation the day I was there. At neither of those places on the two dates I have mentioned were there any barges there for loading coal. There were some cars standing on the tracks at Colona, some empties. There was a lot of coal scattered around, the droppings from the bucket at Conway, and cars standing on the track at Conway, empty cars. Naturally there would be no loaded cars at either place because they were taken out at the end of the day's run, or presumably that is the method that they would use.

By Mr. Younger:

By the figures of daily capacity for the different mines, I mean having knowledge of what a mine is able to do, from experience and from association with them that I can make a statement about it. (1136) The controlling thing in fixing the capacity for the different mines is the number of working places inside. The tipple equipment, the loading facilities, all those things are taken into account, the barge equipment, the tipple equipment, the number of work-

ing places in the mine, the ability of the mine to do a certain thing is generally well recognized. We know what the mines are, 1,000 tons, 1,500, or 2,000 tons. We are making those figures all the time and it is no great secret nor does it take a great amount of skill to state that figure. The thickness of coal in the different mines is not the determining factor in any sense of the word. I have seen mines with 40 inches of coal produce as much as mines with 100 [fol. 1566] inches of coal. That would not be with an equal number of openings or places; the working space determines it, the number of working places and the thickness of the seam are the determining factors. The availability of markets certainly enters into it; if there are no markets then the mine cannot produce, but it still has the capacity to produce. (1132) It cannot enter into the figure of capacity.

Available tons of coal are secured by an intimate knowledge of the tons per acre for the territory in which the mine is located. The number of acres are determined by years of keeping a record of the particular mine in question. The records of acreage are given every year to the county officials of tax assessment and they are open to public inspection. If you have the number of acres, the number of tons is a certain figure based on the thickness of the seam. In my tonnage per acre I do not compute the number of tons in all seams that may be found or may be known to exist, but only in this particular seam in which the mine is operating. I get your point now. We do not operate in Pennsylvania other than one seam, and we do not include in (1138) those figures anything except the seam that is being operated. In other words, Mongah mine has 900 acres of coal allocated to it by its owners, the Pittsburgh Coal Company, and the tons per acre at that particular section of southwestern Pennsylvania will be 9,000. That is the re- [fol. 1567] maining in mine acreage at the Mongah mine of the particular seam that was worked when the Mongah mine was active. That is all of the particular seam in this instance, the Pittsburgh seam. We have not found the condition in Pennsylvania where we have several seams in the same acreage. I do not believe that occurs in Ohio except at one or two isolated points. We have an entirely different situation in the north from what they have in the south, in West Virginia and (1139) eastern Kentucky.

where two or more seams may be worked under the same tract owned by the same individual. When I say we have not that situation in Pennsylvania, I mean we have not got different seams superimposed or underlying the same piece of ground at the same time. They do not exist there in the superimposed or underlying position. In other words, under the Pittsburgh seam of coal we know of no coal until we come to the upper Freeport seam which is about 600 feet lower down. Over the top of the Pittsburgh coal in Pennsylvania we have at one or two places some Sewickley seam; but to get back to the number of acres, all of the acreage owned by this particular company is set forth. For instance, at the Warwick Mine, No. 36 on the list, it is set forth as 2,961 acres. Part of that acreage is Sewickley seam and part of that acreage is Pittsburgh seam, but the entire tonnage is set forth for that particular 2,961 acres. It is set forth as the tonnage at that mine and the ownership of the tonnage at that mine. Both of those seams have [fol. 1568] been worked, but they are working the overlying one now and protecting the bottom one to work in the (1140) future.

I could not give you the percentage on hand without referring to some figures on records that I have, but I would say that the production of steam, and that would include locomotive fuel, power house fuel, apartment house heating, domestic heating, would be the most important use of coal in the United States from the tonnage standpoint. It would be, we will say, the major portion of the use of coal. As to all coals being suitable for and usable for those purposes, that was the prime purpose for which the Creator laid it down, I suppose.

All coals are competitive, and highly so. (1141) All operators are competing with each other for some piece of mythical business or real business. I do not agree that if coals are all of equal quality the user is going to buy the coal that costs him less on a delivered basis, because the user of the coal is going to pay the price for whatever coal he wants, whether it is Pocahontas, No. 8, New River, Thacker, Kenova, or any other coal. If he wants coal for a particular purpose he is going to pay the money for it regardless of freight charges and laid-down cost and dealers' prices and all of the other things that enter into the cost of coal to him. Possibly I have overlooked one of the qualifications

of the question. (1142) I entirely overlooked the phrase of [fol. 1569] the question as to equal quality, because equal quality coals will be sold on a competitive basis and the lower laid-down cost coal will be the one to get the business.

[fol. 1570] Testimony Taken at Washington, D. C., January 4, 1932

Cross-examination of Mr. Hoffacker (continued):

(1144) I stated yesterday afternoon that all coals are competitive for all purposes.

By Mr. Keeler:

The large consumers of the by-product coals that are produced in the Fairmont district in the destination covered by these proceedings, are the steel companies who manufacture by-product coke for their own use and certain domestic or commercial manufacturers of by-product coke. These steel companies, and also some blast furnace companies, produce or purchase coke for use in blast furnaces. (1145) The greatest consumption of coal turned into coke is in blast furnaces. The steel companies in the area of destination here involved have some by-product coal that they operate with captive mines. Not all of the steel companies, however, have such coal. I am thinking particularly of the Otis Company. The Central Alloy crowd have coal suitable for by-product purposes only through their connection with the Republic Steel Corporation. Being a part of the Republic Steel Organization they possibly could call on what coal the Republic Steel might [fol. 1571] have (1146) to furnish them. Otis is the only large steel company in that area that does not have its own by-product coal mines.

Except the Diamond Alkali plant at Painesville, there is no strictly domestic coke plant in that area that I can bring to mind. The Diamond Alkali plant has a mine producing a steam grade of coal known as the river seam mine, and located in the Fairmont district. I am not sure whether they use that river seam coal for by-product purposes, but I believe they do not. I think they buy coal in the open market.

The fusing point of coal decidedly affects its availability for the manufacture of coke for strictly domestic purposes. The fusibility of the ash in the coal mined at the No. 1 plant of the New England Coal & Coke is lower than the fusibility of the ash in mines in the Pittsburgh district, and, being lower at the No. 1 plant, it would not be as desirable (1147) as would be coal from other mines where the fusibility of the ash is higher. There is required a high fusion point of ash in coal used for the purpose of making domestic coke in by-product ovens. I think the fusing point of the coal from the Fairmont No. 1 mine of the New England Fuel & Transportation Company would have an effect on the question of using that coal at the eastern by-product plants.

For general steam purposes it is correct that a coal which is low in moisture, low in volatile matter, and low in ash, is better than one which has a higher percentage of those.

[fol. 1572] By Mr. Bronson:

I am prepared to repeat the analyses I gave on cross-examination, but you will remember that those analyses were given simply from a memory of what happened in various coals.

(1149) The analysis of Pittsburgh coal seams from various rate districts will be as follows: No. 8 district: (1150) Moisture, 3 per cent; volatile matter, 39 per cent; ash, 8.25 per cent; fixed carbon, 49.75 per cent; sulphur, 3.25 per cent; b. t. u. content, 13,000 plus or minus. Range of volatile matter, 39 to 41 per cent.

The notation as to the Pittsburgh district analysis of moisture was that the Pittsburgh district, extending as it does from the old Connellsville basin on the east to the Ohio River on the west, will contain coals varying in character, and the moisture content on the extreme western edge of the field will be slightly lower than that in the No. 8 district of Ohio, and I said from 3 per cent down to 1 per cent. (1151) As to volatile matter, 32 per cent volatile; it will range from 39 per cent down to 30 per cent. The ash will be from 8.5 per cent to 5 per cent. Fixed carbon, 62 per cent in the Pittsburgh district—from 49.75 to 62, acting under this same assumption that we are giving now an extreme for the Pittsburgh district. Sulphur 3.25 to minus 1 per cent. The b. t. u. from 13,000 o 14,250. (1152)

There is no Pittsburgh seam in the Cambridge district that is being mined.

[fol. 1573] The Cambridge district coal, for the record, this is the No. 7 coal of Ohio—has a moisture content of 3 per cent; volatile matter, 38.50 per cent; ash, 7.5 per cent; fixed carbon, 51 per cent; sulphur, 2 to 2.5 per cent; b. t. u. content, 13,000. The range of volatile matter is from 38.5 to 41 per cent. The b. t. u.'s will not be exactly 13,000, it will be 13,000 plus.

It is a good general statement that the analyses of the coal in the Pittsburgh district on the Pittsburgh & West Virginia Railway, in what is known as the Avella section, corresponds to the No. 8 analysis.

(1153) The analyses of the several coals I have given naturally reflect the relative commercial values of the several coals. They reflect on a heat value basis. You are generally buying heat value of coking quality or usage when you are buying coal.

(1154) In my short career I have been engaged in the buying and selling of coal to a limited extent. The question as to whether, from the standpoint of heat values of the several coals, a buyer of coal in the Cleveland market would be justified in paying a higher delivered price for Pittsburgh district coal, standard coal, for steam and domestic purposes only, not for by-product, gas, or metallurgical purposes, than No. 8 or Cambridge coal, would resolve itself entirely into a laid-down price per number of heat units. (1155) If the price paid for the No. 8 coal was not out of line with the price paid for the Pittsburgh coal you would still get yourself into the same position of [fol. 1574] buying heat value. If we take the heat value of the good Ohio coal we will find that it is not equal to the heat value of the good Pittsburgh district coal. The standard coal of the two, the ordinary coal for domestic and steam purposes, would be slightly better with regard to the Panhandle district, if by that you mean the standard Pittsburgh coal. That is our steam coal area, the Panhandle steam coal district of Allegheny and Washington counties. That includes the Avella district. I mean by that that the standard steam coals of the steam coal section of the Pittsburgh district are better (1156) than the standard steam coals of the No. 8 district.

When I say the Panhandle district, I am using it from

the old name that it derived—the Panhandle steam coal district is a trade name, known for years. It includes the area west from Pittsburgh, extending across Allegheny and Washington counties and even into that portion of what is known as the Panhandle of West Virginia on the Pittsburgh and West Virginia and Pennsylvania Railroads. That is what I meant when I referred to the Panhandle district several times; it is a general term known to the trade.

By Mr. Henry C. Hall:

The chemical character of coal is determined by hundreds of such analyses as I have here. The only way that I know to determine the chemical (1157) character of a thing is to make an analysis of it, and the analyses that I have endeavored to set forth in this testimony are general analyses of the particular seams in the particular districts under discussion.

[fol. 1573] I have hundreds and thousands of those analyses of samples taken in the mines, samples taken on the cars, samples taken by customers on arrival, samples taken in bins, and samples taken at various places. The testimony which I have given as to the chemical character of these various coals is based upon those analyses. I must have a broad general knowledge of the chemical quality of coals from the districts to be of any service to people who may care to employ me.

Under examination by Mr. Ballard, I was asked and gave what I called the fair average analyses. To arrive at that I would take the very best and very worst, (1158) and not exactly split the difference. You could not do that, you must base it on a period between the very worst and the very best. It is possibly like the old definition of art, that it is nature viewed through a temperament. I hope it is something better than that. I claim that is experience, plus capacity. That is what I have endeavored to set forth.

By Mr. Bronson:

The Avella coal is more valuable than standard Ohio No. 8 coal, from the heat standpoint, to the extent of 100, 200 or 300 b.t.u's. (1159) The difference would be appreciable, depending upon the use to which the coal was put.

That would be true in the manufacture of steam or in the use for a domestic purpose.

[fol. 1576] By Mr. Gutheim:

Coal from both the Oakmont mine of the Hillman Coal & Coke Company (1160) and the Renton No. 3 and 5 mines of the Union Collieries Company, has been sold and used successfully for gas coal purposes. Those mines produce coal from the thick Freeport seam. Those mines are located northeast of Pittsburgh. I do not know as I am able to determine what the output of any mine is regularly sold for other than a captive mine, but I would say that the general sale of coal from those mines would be for steam coal usage.

The New England Gas & Coal Company mine that I described as one producing coal usable for by-product purposes, is their No. 1 mine. (1161) It is located on the Baltimore & Ohio Railroad and the Monongahela Railway.

When I said that West Newton was in the Connellsville district, I had reference to the freight rate district. I am not informed on that point, without going to some trouble of looking it up. It is on the edge of the district and I may be able to give it to you with the assistance of some help here, if that is necessary.

There are a few of the mines on Exhibit 148 which are river mines only. The Colonial Dook Mine of the H. C. Frick Coke Company is a river mine only. By that, I mean that it is not impossible for the coal to be loaded on the rail, but usage demands that it be loaded on the river.

That applies generally to the so called captive mines of the Frick Coke Company and Vesta Coal Company and [fol. 1577] the Weirton Coal Company, the Buckeye Coal Company, the Nemacolin Mine.

(1162) Most any of these mines on this exhibit could load coal if they were required to do so on the railroad, but the desire of their owners to ship coal by river is the governing factor in the movement of the coal.

The commercial mines, generally speaking, are rail and river tipples, or have what is known as rail and river connections. They all ship both rail and river, which is a general statement.

The mines located on the railroads are located on the Monongahela division of the Pittsburgh & Lake Erie Rail-

road and on the P. V. & C. Division of the Pennsylvania Railroad and on the Monongahela Railway, these being the lines that generally parallel the Monongahela River going up from Pittsburgh, with the exception of one or two short spurs back from the river. (1163) I know generally that the rate breaks at Brownsville and Millsboro on the river.

With respect to the captive mines, it is a correct statement to say that except only with respect to the Buckeye Coal Company mines, Nemacolin, that all of the captive owners have consuming plants in the Pittsburgh-Steubenville-Wheeling iron and steel manufacturing district, with this exception: The Steel Corporation has consumption at Cleveland and Lorain; it largely has consumption along the river also.

[fol. 1578] (1164) The Duquesne Light Company owns the Warwick mine of the Warwick Coal Company, and uses its output for steam purposes entirely. The O. & P. Electric Company, at Toronto, Ohio, obtains coal from mines on the Monongahela River, shown on Exhibit 148. There are no others to my immediate recollection. The Springdale plant, which is located on the Allegheny River, owned by the West Penn Electric Company, simply draws its coal from underground across the river up into the yard of the plant. And the Colfax Plant of the Duquesne Light Company on the Allegheny River receives its supply of coal from an operation behind the plant, what we might say, is along the river.

There may be one or two small power plants further down the Ohio River which secure a supply of steam coal, but I have no recollection of them at this moment.

(1165) I have previously said that any coal may be used for steam purposes, and that to that extent, some of the gas coal production of these mines is useful and used for steam purposes.

I have allotted to the mines set forth on this exhibit all of the coal that they possess. There might be one or two pieces of coal that could be secured along the river that would be suitable for steam, gas, or by-product purposes. I know of only one at this time. The tons of available coal I show on this exhibit would be tons at the commencement of the years set forth. The exhibit was corrected to January [fol. 1579] 1, 1932, and would necessarily include the production during the year 1931.

Crescent Mine No. 11, with a production in 1926 of 9,734 tons, necessarily had to be shut down during that year. (1166) Again in 1927 your contention is correct that it had not come into full production during that year. In other words, that was a part of the Pittsburgh Coal Company's shut down program.

The idleness of the Y. & O. Mine at Charleroi in 1927 and 1928, was due to the inability to operate for some unknown reason. It may have been strikes, it may have been lack of ability to sell the coal, but it was more likely labor troubles. The Y. & O. Coal Company operates to a great extent in the No. 8 district and in the Middle District. I think it is correct that 1927 was a strike year in the No. 8 district, at the termination of the so-called Jacksonville Agreement. I would say that it is correct that the Y. & O. Mine, Charleroi, on the river, was also shut down for the same reason at the same time.

(1167) There are no river mines equipped with river tipples that are not shown on this exhibit. The Poland Mine had no river tipple. They had some makeshift facilities for loading coal on the river at one time, but they have disappeared through neglect and lack of desire to load on the river. They have not loaded on the river within the past 5 years to my knowledge.

[fol. 1580] By Mr. Bronson:

I believe the Cambridge coal for heat purposes would be equally as good as the Avella coal and the coal produced at mines west of Pittsburgh in the Pittsburgh district. We are comparing the best now in Ohio with what is not the best in Pennsylvania. The Avella coal west of Pittsburgh is not the best coal for steam, (1168) not the best for any purpose. That coal is used only for steam and domestic purposes. That is not the best steam and domestic purpose coal in the Pittsburgh district. Coal east, south, and southeast of Pittsburgh is more valuable for heat purposes.

By Mr. Gutheim:

It is the proper statement to make, that I could summarize what I have said about analyses as respects No. 8 and Pittsburgh, in this statement, that I start off on the western edge of the Pittsburgh district with a coal approxi-

mately the same as in No. 8, and then I grade from that to the level, either up or down, of the Connellsville basin coal, as I go east.

Redirect examination.

By Mr. Martin:

(1169) Since yesterday afternoon I have made an investigation of the number of mines in the No. 8 district to show the percentage in number and in aggregate capacity of the No. 8 district mines that are working seams other than Pittsburgh No. 8 vein. The number of mines working the [fol. 1581] No. 8 or Pittsburgh seam in the No. 8 freight rate district compare as 95 per cent of the total daily capacity to 5 per cent for mines working other than the No. 8 seam. That statement is confined to the active mines, as set forth in Kern's exhibit. (1170) Those percentage figures are as of the present. The number of active mines, including all of those shown on the current exhibit, total 70 in the No. 8 district. The number of mines working the No. 8 seam is 65, and represents 94 per cent of the total. Consequently, the number of mines working other than the No. 8 seam is 5, and represents 6 per cent of the total daily capacity. I have given the number of mines and the percentage of the aggregate daily capacity. The aggregate daily capacity of mines working the No. 8 coal is 94 per cent; in tons, it is 85,800. The mines working seams other than the No. 8 seam have a total daily capacity of 5,400 tons. It is true that, taking the number of mines involved, without any reference to their aggregate capacities, the mines in the No. 8 district working seams other than Pittsburgh No. 8 vein represents 5 per cent of the total number of active mines in that district. Speaking still of active mines, the capacity of those particular mines that are working veins other than Pittsburgh No. 8 represent 6 per cent of the aggregate capacity of all of the active mines in the Ohio No. 8 district. (1172)

[fol. 1582] The number of mines working all seams in the Ohio No. 8 district is 70, with a daily capacity of 91,200 tons. The number of mines working seams other than the No. 8 is 5, with a daily capacity of 5,400 tons. The No. 8 seam is, therefore, operating 94 per cent of capacity of

all the mines in the No. 8 district, and 93 per cent of the number of mines in the No. 8 district. That includes both the active and inactive mines, and all mines that may be regarded as potential producers of coal.

The last figures given included all mines, active and inactive. That is, there are 70 mines, active and inactive. (1173) On the Kerns exhibit the total number of active mines, and they included mines producing one or more cars during a certain period, was 55.

The authority for the information I have just given is the various lists showing coal operations on the line of the various railroads serving the district, together with Mac's Directory, published by the Coal Information Bureau of Pittsburgh, set forth as the 1932-1933 edition. I hope it is regarded as an authoritative publication in the coal trade, as I aid and assist in the publication of it.

The best coal produced in the Ohio No. 8 district is not as good as the best coal produced in the Pittsburgh district (1174) There is a wide variation, both as to heat value and as to usage value, between the best coals in the two districts.

[fol. 1583] The same answer holds true as to the average of the Ohio No. 8 coals as compared with the average of the Pittsburgh district coal, that the average of the Ohio coals, including the No. 8 district, are not as valuable from a heat standpoint or a usage standpoint as the average coals in Pittsburgh, Connellsville, Fairmont, or any other district in West Virginia or eastern Kentucky.

The coal produced at the Nelms mine on the Wheeling & Lake Erie is poorer in quality than the best coal in the Pittsburgh district. This Nelms Mine coal, being in the No. 8 district of Ohio, is regarded as the best coal in that section, but it cannot compare with the best coal in the Pittsburgh district. I mean by that it has a lower chemical quality, or that it is poorer in chemical quality. (1175) It is not suitable and is not used for by-product coking purposes, while the best coal in the Pitfsburgh district is suitable and it is so used.

In explanation of why the daily capacity shown on my Exhibit 148 may be lower in some instances than the 1926 or 1927 production shown opposite those mines, I would say that every year a mine passes through will change its

ability to produce coal. The daily capacity will either decrease or increase, and it seldom remains constant. If a mine has reached its peak in daily capacity and continues to operate then its daily capacity must continue to drop, due to the limiting of the working places and the exhaustion of the coal in the mine. My column as to daily capacity [fol. 1584] would speak as of today. If we wanted to know what the capacity of each one of these particular mines is today or next week or what they might do this year—suppose they wanted to know what they could do in 1933, we would take the daily capacity and allocate 250 working (1176) days to it to determine what that mine could produce during the forthcoming year. That might be necessary for the purpose of drawing a contract.

I have a photograph of the Pittsburgh & Lake Erie Railroad Company river-rail transport plant at Colona, Pa., taken in April, 1932. That photograph contains, printed upon it, certain data as to the capacity and dimensions of the plant. The photograph represents the machine and general view as I witnessed it on my visit to Colona. I was all over it and out on the end of the boom and under it and through it, and I would (1177) say it represented my impression of the plant on the day I visited it.

(Exhibit 149, Witness Hoffacker, received in evidence.)

I was furnished at the same time with another view of the same transfer plant, showing the same statistical data.

(Exhibit 150, Witness Hoffacker, received in evidence.)

These photographs were furnished to me by the Pittsburgh & Lake Erie Railroad Company, as a matter of information and possibly for advertising. They furnished [fol. 1585] me with that photograph, together with the data set forth in a copy of the tariff, setting forth the rates on the coal from that transfer point, that is (1178), the Ex-River rates, to Youngstown, Warren, Cleveland, and other points in Ohio. That is a matter of common courtesy or of gratuitous information that is handed out. The statistical information shown on these two exhibits was a part of the package when it was received by me from the Pittsburgh & Lake Erie Railroad. Both of these exhibits bear the date April 21, 1932. That was evidently the date the photographs were taken. That was not the date of the re-

ceipt, which was some time possibly after the establish ment of the rates, or about July 16th of this last year.

(1182) The source of the information as to the capacity of the plant of the Pennsylvania Railroad Company at Conway, was the contracting company who erected the plant, the Regnon Contracting Company, Neville Island, Pittsburgh. I have a photograph of that transfer plant at Conway, which was taken under my direction and in my presence.

Mr. Orcutt: May it be understood, Mr. Examiner, that my objection goes to all this testimony so that I will not have to repeat it?

Exam. Trezise: Yes, as to the capacity of this plant.

Mr. Orcutt: Or as to the transfer plant itself, capacity, operation, cost, or anything else.

Exam. Trezise: Very well, that will be understood.

[fol. 1586] (1183) The photograph now handed me is the one to which I refer.

(Exhibit 151, Witness Hoffacker, received in evidence.)

The highest utility of coal in my opinion is the by prod uct coking of coal. At the present time there does not seem to be any utility for coal. By highest utility, I mean greatest value in dollars and cents return value, which is the same thing as market value. (1184) The general metallurgical use of coal is regarded as the highest utili tarian use. Some of the other metallurgical uses are for the malleable iron trade, for the gas trade, for the manu facture of coke for metallurgical purposes, and for the manufacture of gas in any other ways in which gas is manufactured.

The analyses which I gave yesterday and today are the result of my own experience, as I have previously stated to Mr. Commissioner Hall. There could not be any specific analysis from any specific Government publication.

(1185) The Middle District coal contains some coal equal in quality to the Cambridge district, especially in that section around Amsterdam and Bergholz. The Mid dle District coal will vary little if any from the Cambridge district coal in a chemical analysis.

In my statement this morning that all coals are com petitive for all purposes, I meant by that the fact that a

coal produced in a certain district is generally competitive with a coal produced in another district and in its own district. I do not mean by that to change my testimony that [fol. 1587] Ohio produces no by-product coking coal. There is no change of status as regards Ohio coal in any of the testimony that I have given, and I do not mean in any way to modify any of the comparisons that I have made between coals from the various districts.

The commercial value of coal depends upon the heat value, and naturally, also, depends upon its value for by-product coking, metallurgical or gas purposes.

(1186) As to whether a consumer in northeastern Ohio would be justified in paying more for coal delivered to him from the Pittsburgh district than for coal delivered to him from the No. 8 district, for steam, domestic and industrial purposes (1187), I would say that a customer in Cleveland, for instance, would be justified in paying more for coal from the southern West Virginia fields than for coal from the Ohio No. 8 fields if the desired effect was secured and he was used to the coal and he got better value from the southern district coals than from the No. 8 coal. In burning the coal from southern West Virginia or eastern Kentucky fields in the domestic furnace, he would obtain a greater heat value than he would obtain from the No. 8 coal, and he would obtain possibly a greater satisfaction, because of the lack of sulphur, the clinkering of the ash, the cleaning of the fires, and the freer burning of the coal. That would be more pronounced and more striking in the case of low volatile coals, and that is one of the reasons [fol. 1588] why low volatile coal is sold in the northwest for domestic purposes. The customer is not concerned with the laid down (1188) price of the article; he is concerned with the kind of an article he is buying. For domestic purposes, particularly, this low volatile coal is markedly superior to the Ohio No. 8 coal.

(1189) The five active mines producing coal other than the Pittsburgh seam in the No. 8 district are as follows: Nelms mine, Ohio and Pennsylvania Coal Company, Cadiz, Ohio, No. 16, 3,000 tons daily capacity.

Castner Mine, Warner Colleries Company, Steubenville, Ohio, No. 16, 500 tons.

Coal Corporation Mine No. 3, owned by Coal, Inc., on

the Baltimore & Ohio Railroad, operating No. 8-A, or Redstone seam, 600 tons capacity, Flushing, Ohio.

The Highshaft Mine, Steubenville Coal Mining Company, located at Steubenville, operating No. 16, 500 tons daily capacity.

The Steubenville Mine of the Consumers Mining Company, located at Steubenville, Ohio, operating No. 16, 800 tons daily capacity.

That totals five mines, and 5,400 tons daily capacity. The daily capacity of the mines working the Pittsburgh seam is 85,800 tons. (1190) That is all the mines, all the 65 mines. That includes the 52 active mines on the Kerns exhibit. The capacity of the 52 active mines on the Kerns exhibit is 71,200 tons daily capacity from the No. 8 seam.

[fol. 1589] Recross-examination.

By Mr. Orcutt:

(1191) In referring to the greatest utility of coal being for by-product purposes, I was referring to value—I referred to the mine price figure, in valuation terms. In other words, coal suitable for by-product purposes generally sells at a higher mine price than other types of coal. That includes bituminous coal only, and not anthracite coal. That was not contradicting the statement that the greatest use for coal in number of tons (1192) was for steam and domestic purposes.

Q. Now, as to the higher prices at Cleveland for West Virginia or other coals, as compared with Ohio, if I understood your discourse correctly, it was nothing more or less than a statement that the Cleveland consumer was justified in paying more for West Virginia coal than Ohio coal if it was worth more for the purpose for which he intended to use it.

[fol. 1590] By Mr. Day:

This morning I compared the Middle District coal to the Cambridge, and said that, generally, it would differ but very little. With reference to a further comparison with the coal from Bergholz (1193), I would say there is a similarity in the coal in the three groups, with this exception, that the Cambridge coal and the Bergholz coal is

better than the No. 8 coal mined from the Pittsburgh seam. I think that is clearly set forth on the record. I at least endeavored to set it forth clearly. These coals are shipped as mine run, screened, slack, or any size that anybody may desire. There are preparation plants for the cleaning and sizing of coal in each district. That is true not only of the three Ohio districts named, but all coal producing districts.

By Mr. Keeler:

In the operation of by-product ovens, the coal is generally (1194) pulverized to pass a 100 or 80 mesh screen. If the quality of the slack coal is sufficiently high, it is possible for by-product ovens to use slack coal. The purchaser of by-product coal generally secures his coal on a mine-run basis, due to this crushing. Any slack coal he may buy, if it is sufficiently high in chemical character to be useful for by-product purposes, is in addition or is a help to him. I am thinking in values for by-product coals from a utilitarian and a mine return standpoint, and not [fol. 1591] especially of slack which might be purchased in the low volatile districts of West Virginia where they do sell a certain amount of their slack for by-product coking.

(1195) Slack coal is generally distress coal, and it always brings a low price, due to the fact that it is distress coal. It is something that is not readily salable, and I do not know that its value enters into the situation as I have set it forth. The by-product coal is a high value coal. We may secure a specific instance where slack coal suitable for by-product mixture may be purchased for 10 cents a ton or for paying the freight. I will agree with you that that is correct, and I think there are some instances in which it is now being done, you can take the slack away and have it and it is slack suitable for mixing with other coals to make by-product coke. The development of modern stokers and more modern combustion plants has increased the availability and the efficiency of the lower grade coals in steam raising use.

[fol. 1592] Redirect examination.

By Mr. Martin:

(1197) Consumers of coal for steam and domestic pur-

poses in the northeastern Ohio would be justified in paying more for high volatile and low volatile coals from the southern districts in southern West Virginia and eastern Kentucky than they would for Ohio No. 8 coal delivered at their points of consumption, because the coal from the southern West Virginia and eastern Kentucky sections would serve their purpose in a better (1198) manner than would the coal from the No. 8 District. In the case of the smokeless coals, they would not have the smoke nuisance to contend with; they would have a higher heat value in the coal, a lower sulphur value and a general, all-around better steam and domestic purpose coal. I could not give you how much more they would be justified in paying in dollars and cents. I think the degree of justification would depend on the desire of the purchaser.

The same would hold true for the high volatile coals of southern West Virginia and eastern Kentucky used primarily for steam and domestic purposes, on account of the fact that they contain a lower percentage of ash and sulphur and are generally an all-around better grade of steam coal for either domestic or general steam use.

[fol. 1593] Recross-examination.

By Mr. Orcutt:

(1199) Certainly the desire of the purchaser causes him to purchase the coal regardless of the laid-down cost. A consumer of coal in Cleveland, which we will take for instance, who wants eastern Kentucky, southern West Virginia or the low volatile coals of the New River or Pocahontas District cannot be swayed from his position on account of the price. He is buying that coal for a certain purpose, and the price is a matter of secondary importance to him. That is true both for steam and domestic purposes.

By Mr. Bronson:

That would also apply to the householder. It is more particularly true with respect to low volatile coal. (1200) That applies in a lesser degree to the western part of the Pittsburgh District coal, where the coal is practically the same as Ohio No. 8 coal. I would not say how much less.

I could not get out a slide rule and calculate it in dollars and cents.

By Mr. Gutheim:

It is a correct statement that it applies most definitely as between first, the low volatile coal in the South and, next, the high volatile coal in the South. It applies in a lesser degree as between the high volatile coal in the South and the high volatile in the North. I think the small consumer, who just buys coal, is not as much concerned with [fol. 1594] the laid-down price of the article as is the large purchaser. (1201) He might be more concerned simply with the fact that he was using low volatile coal rather than some other coal.

CHARLES W. VILAS was called as a witness and, having been duly sworn, testified as follows:

Direct examination.

By Mr. Martin:

My name is Charles W. Vilas; Cleveland, Ohio; Treasurer and General Manager of the Groch-Vilas Coal Company, of that city. The business of that company is jobbing coal. They have been in business since 1920, and I have been with them since 1922.

On behalf of the Groch-Vilas Coal Company I recently purchased coal for account of the Wheeling & Lake Erie Railway (1202) Company from mines on the Monongahela and Ohio Rivers equipped with river tipples. Those purchases were made in November, 1932. Mr. Durham, of the Wheeling, called me to his office and asked that we purchase some coal on the Monongahela and Ohio Rivers and, after purchasing the coal, arrange for its transportation to Conway, for the coal barges on the Monongahela River, and to Martins Ferry, on the Ohio River, for barging to those points and lifting at those points. That is, to Martins Ferry for coal purchased on the Ohio River, and to Conway for coal purchased on the Monongahela River. [fol. 1595] We purchased one barge load of coal from the Ella Mine of the Hillman Coal & Coke Company and one

barge load of coal from the Moffitt Mine of the Hillman Coal & Coke Company.

We also purchased one barge load of coal from the Castanzo Mine of the Castanzo Coal Mining Company, and one barge load (1203) from the Alexandria Mine of the Valley Camp Coal Company. I think it is correct that the mine of the Castanzo Coal Mining Company, to which I have referred, is sometimes referred to as the Stop No. 6 Mine of the Wheeling Coal Company. At any rate, it is No. 208 on Exhibit 141.

The coal in every instance was purchased f. o. b. barge at the river tipple. The Ella Mine is No. 5 on Exhibit 141. The Moffitt Mine is No. 42. The Castanzo Mine is No. 208, and the Alexandria Mine is No. 206.

I arranged with the Hillman Coal & Coke Company to do the towing from the Ella Mine and the Moffitt Mine to Conway. I will file, as Exhibit 152, a photostat copy of the receipted bill for the towing of a barge of coal from the Moffitt Mine to Conway.

(Exhibit 152, Witness Vilas, received in evidence.)

This is a true photostat copy of the bill as received by me from the Hillman Coal & Coke Company (1204) after it had been paid, except that I have added the word "Moffitt" in the lower left hand corner. I did that for our own records at the time. The Moffitt Mine is in the Connellsville Rate District.

[fol. 1596] As my exhibit 153, I will file a photostat copy of the receipted bill for the towing of coal from the Ella Mine to Conway.

(Exhibit 153, Witness Vilas, received in evidence.)

This Exhibit 153 is a correct photostat copy of the bill for the towing of coal from the Ella Mine, with the exception of the word "Ella" on it, which I added for purposes of identification. The Ella Mine is located in the Pittsburgh Rate District.

All of this coal from the Moffitt Mine and the Ella Mine was transferred from barges to railway cars through the Pennsylvania Railroad plant at Conway, Pa., (1205) and moved to Canton, Ohio, via the Pennsylvania route, at the ex-river rate of $1.02, plus 12 cents for lifting, plus the emergency charge of 6 cents. The charge for towing in each

instance, as shown by Exhibits 152 and 153, was 25 cents a net ton. Seventeen cars were involved in this movement from the Moffitt Mine and twelve cars from the Ella Mine.

We arranged with the Belmont Supply Company, of Martins Ferry, whose plant is at Martins Ferry, for the towing and transfer of the coal purchased from the Castanzo Mine, which is practically directly across the river from the Belmont Supply Company, I think perhaps it is about a half mile away, but very close to being directly across the (1206) river. I will file as my next exhibit a photostat copy of the receipted bill of the Belmont Supply Company for this tow-[fol. 1597] ing and transfer, as Exhibit 154.

(Exhibit 154, Witness Vilas, received in evidence.)

This is a correct photostat copy of the paid bill of the Belmont Supply Company for this towing and transfer.

We arranged with the Wheeling Steel Corporation for the barging and lifting of the coal purchased from the Valley Camp Coal Company at their plant at Martins Ferry. I file as Exhibit 155 a photostat copy of the receipted bill for this towing and transfer.

(Exhibit 155, Witness Vilas, received in evidence.)

This Exhibit 155 is a correct copy of the paid bill of the Wheeling Steel Corporation for that towing and transfer.

Exhibits 152 and 153 relate to the towing charges only. (1207) The charges for the transfer of the coal from river barges to railway cars were made by the Pennsylvania Railroad Company. Exhibits 154 and 155 include both the barging of the coal on the river and the transferring of it through the transfer plants at Martins Ferry from barges to railway cars. The result of the exhibits is that the coal from the Monongahela River mines was barged to Conway for 25 cents a ton; and that the coal from the Castanzo Mine was barged and transferred for 15 cents a ton; and the coal from the Valley Camp Mine was barged and transferred for 18 cents a ton.

[fol. 1598] Cross-examination.

By Mr. Bull:

I have sold the Wheeling & Lake Erie Railway coal before, (1208) but of course I have had to purchase it, because we

are jobbers. All this coal was intended for railway fuel. I was asked to buy two barge loads of coal on the Monogahela River and two barge loads on the Ohio River. It was requested that I purchase one of those barge loads in the Connellsville District and one in the Pittsburgh District. For all practical purposes, those are, I believe, the only two mines in that district that are loading commercial river coal.

(1209) I do not know whether or not the Hillman Coal & Coke Company will tow for the public generally. I assume that they will, because they did for me. I had never done any business with them before. I am sure the Belmont Supply Company will tow for the public generally. That is also true of the Wheeling Steel Corporation. The order for this coal was given to me the early part of November. That coal was billed at Canton in both cases. This was all Wheeling & Lake Erie fuel coal.

By Mr. Orcutt:

(1210) I stated I had purchased coal for or sold coal frequently to the Wheeling & Lake Erie for a period of six or seven years, I imagine, practically every month. I purchased that coal in the No. 8 District in Ohio. That had been true at all times until this transaction. I cannot answer [fol. 1599] where that coal is delivered to the Wheeling & Lake Erie. They take it at the mines. They furnish the cars at the mines and take the coal at the mines.

This coal was purchased f. o. b. the barge at the mine. (1211) In Exhibits 152 and 153, the two Hillman mines, I show the towing cost at 25 cents per net ton. That does not include the transfer from barge to car. In Exhibit 154, the Belmont Supply Company bill for the cost of transferring and barging is 15 cents. I do not know what portion that 15 cents represents the barging and what portion represents the transferring. In Exhibit 155 the cost of towing and unloading from the barge to the cars is 18 cents. I do not know what portion of that is barging and what portion is transferring. I did not make inquiry of the Belmont Supply Company as to their cost of transferring at Martins Ferry. (1212) I went down there and took care of both those items. I made the best deal I could—as jobbers always do. I did not discuss the cost of barging with them, or with the Wheeling Steel Corporation. I had some general ideas on the subject,

and I simply went down there and negotiated with them, and we finally arrived at those prices, which were satisfactory to me. I simply asked them how much they would charge me for barging the coal and lifting it into the cars, and they told me they would do it for that price, (1213) and I said that that was satisfactory. That was practically the extent of our ne- [fol. 1600] gotiations. They said it was the best they could do for me.

I negotiated with the Hillman Coal & Coke Company on it, and we finally arrived at that figure. I negotiated by letter and telephone. They first quoted me 30 cents, and I told them I thought that was a little high, and we finally arrived at the 25 cents, which was O. K. They simply asked me if there would be any further tonnage, and I told them that I could not say, but that I hoped so.

On the Monongahela River I did not get any bids from other concerns. I was unable to. (1214) I wrote the Union Barge Line on the subject. They would not quote me. They said they were not interested, or something to that effect. I do not find that letter, it is not here. But I remember now that it was the Union Barge Line at Pittsburgh to which I wrote. We had a little correspondence back and forth, and they were not interested. I do not know the reason why.

The Moffitt Mine is in Pool 7, I believe, farther up the River from Pool 6, farther south.

When this order was placed with me by the Wheeling & Lake Erie, they did not specify the price I was to pay for the coal. (1215) They just told me to purchase some coal on the Monongahela River, coal suitable for railroad fuel. They said they would like some from the Connellsville District and some from the Pittsburgh District, farther down the river. I did not sell this coal to them at a delivered price at Canton. I sold it to them at a price f. o. b. the mine, plus 25 cents a ton for towing, plus the freight rate from Conway to Canton, which included the 12-cent lifting charge which the railroad company included on their [fol. 1601] freight bills. The coal from the Moffitt Mine was all mine-run coal. (1216) We paid Hillman 65 cents a ton for the Moffitt coal and charged the Wheeling 80 cents for it. We paid Hillman $1.15 for the Ella coal, which was

run of mine, and charged them $1.30 for it. The $1.30 plus 25-cent towing charge plus the 12-cent lifting charge plus the freight rate to Canton was what that coal cost the Wheeling & Lake Erie.

(1218) The average price of fuel coal sold by me to the Wheeling & Lake Erie from Ohio No. 8 during the period from September 1st to January 1st, 1932, was $1.30 f. o. b. mine. That has been the only price during that period. I sold them considerable tonnage at that price from Ohio No. 8.

I paid $1.00 f. o. b. mine for the Castanzo coal and charged $1.15 for it. Castanzo is not Ohio No. 8; it is approximately the same grade of coal. Castanzo coal is Moundsville coal, if I am not mistaken. We bought the coal barged by the Wheeling Steel Corporation for ninety cents ($.90) and sold it for $1.25. (1219) As to whether I will continue to sell them Ohio No. 8 coal or purchase their requirements from the Castanzo Mine, I will sell them anything I can. They specify the particular mine that the coal is to come from when they purchase through me. That is they generally do. Usually I cannot go out and bargain for the best price I can get.

[fol. 1602] When I purchased this Hillman coal for 65 cents a ton, the Hillman Coal & Coke Company did not know for whom it was intended to be used ultimately. None of the operators knew for whom this coal was being purchased. The operators of the barges, the Belmont Supply Company or the Wheeling Steel Corporation, at the time I made the arrangements for the handling of the coal, did not know for whom the coal was being purchased. (1220) That coal was dumped into Wheeling & Lake Erie Railway cars which were set out there for fuel coal. I might be mistaken as to their being sent there for fuel coal; I do not know that for sure. In other words, there was nothing said between myself and either the Wheeling Steel Corporation or the Belmont Supply Company as to where the coal was going or to whom it was sold.

The Ella Mine is in Pool No. 3, and is 53 miles from Conway, and the Moffitt Mine is 111 miles. I took the matter up with the Hillman Coal & Coke Company at the time as to why the barging or towing charge was the same in both instances, and it was simply the best I could do. I asked them why I could not get the Ella coal barged to Con-

way for less money than the Moffitt coal. (1221) They just said they could not do it.

[fol. 1603] By Mr. Webber:

The coal which was in barge No. 271 was loaded into the cars shown on my Exhibit 155. The coal was hauled to Martins Ferry in barge No. 271 of the Wheeling Steel Corporation. I think it was one of its own barges. That corporation never performed such service before for me. I think they would be very glad to handle a lot of coal. I do not know whether or not it holds itself out to perform service such as it performed here for me. I think so. (1222) I do not know that it has no barges except those which it uses in moving its own coke. They have a lot of barges of their own, and they are moving coal from the Alexandria Mine to their own plants. I do not know if those barges are used wholly in that service. This one was not. That company undoubtedly has an excess of barges in times when business is low at the plant. My understanding is that they handled a great deal of coal on the river for the Valley Camp Coal Company at one time, but I do not think they do so now. I made a special arrangement for this particular purpose with the Wheeling Steel Corporation, but I cannot answer definitely that it is not generally in the towing business.

By Mr. Orcutt:

(1223) I did not ask the Hillman Coal & Coke Company for any price for going from Pool 7 or from Pool 3 to Steubenville or Mingo Junction. I do not think the Wheeling & Lake Erie desired to have the coal delivered to them there. [fol. 1604] They asked me to have it delivered at Conway.

By Mr. Gutheim:

In the case of the Hillman Coal & Coke Company, the coal in both instances was run of mine, one lot f. o. b. mine at 65 cents a ton and the other at $1.15 a ton, and bought on the same day, but the reason for the difference in the mine price is due to the quality of the coal.

I did not buy either steam or gas coal. As to why I went farther up and bought other coal for $1.15 when I could get good steam coal for 65 cents, (1224) I think that has

been explained in my testimony before. I was requested to buy some coal from the Connellsville District and some from the Pittsburgh District. Apparently the difference of four or five hundred dollars in the f. o. b. mine price of the coal made no difference to the Wheeling.

The Hillman coal was transferred at Conway by a railroad transfer machine at the regular established rate. The shipments of Castanzo coal and the coal handled by the Wheeling Steel Corporation were handled over private transfer facilities.

[fol. 1605] (1225) GEORGE DURHAM, having been previously sworn, was recalled and testified as follows:

Direct examination.

By Mr. Martin:

I have caused to be prepared an exhibit showing a comparison of the transportation charges for the interstate river-rail movement of coal from mines on the Monongahela River in the Pittsburgh and Connellsville Districts to Cleveland, Lorain, Canton and Massillon, via Conway or Colona, Pa., with the all-rail rates from the Pittsburgh and Connellsville Districts to the same destinations, and now file it as Exhibit 156.

(Exhibit 156, Witness Durham, received in evidence.)

In this exhibit I have shown the present all-rail rates from the Pittsburgh and Connellsville Districts to these four destinations, compared with the river-rail charges for (1226) the movement of coal from river mines on the Monongahela River to these same destinations.

The towing charge used is that testified to by Mr. Vilas. The transfer charge of 12 cents per ton is that published in the tariffs of the Pittsburgh and Lake Erie and Pennsylvania Railroads and referred to in my previous testimony.

This exhibit shows that to Cleveland and Lorain coal can move river and rail from mines on the Monongahela River in the Pittsburgh and Connellsville Districts at a transporta-[fol. 1606] tion cost of $1.64 per ton, which is 20 cents under the existing all-rail rate from the Pittsburgh District to

Cleveland and Lorain, and 25 cents under the existing all-rail rate from the Connellsville District to Cleveland and Lorain, and that to Canton and Massillon, coal can move river and rail from these mines at total transportation charges of $1.39 per ton, which is likewise 20 cents per ton less than the all-rail rates from the Pittsburgh District to those points, and 26 cents less than the all-rail rate from the Connellsville District to those points.

I have caused to be prepared a similar exhibit showing a comparison of the transportation charges for the river-rail movement, interstate, of coal from mines on the Ohio River to Canton, Massillon, Cleveland, and Lorain via Martins Ferry, Ohio, with the all-rail rates from the Ohio No. 8 District to the same destinations (1227), and now file it as Exhibit 157.

(Exhibit 157, Witness Durham, received in evidence.)

In this exhibit I have shown the present all-rail rates from the Ohio No. 8 District to these four destinations, and those existing prior to August 1, 1932, compared with the river-rail transportation charges for the movement of coal from the Wheeling Coal Company, or Costanzo Coal Company, mine at Warwood, W. Va., and the Valley Camp Coal Company mine at Moundsville, W. Va., to these same destina-
[fol. 1607] tions. The towing and transfer charges used are those testified to by Mr. Vilas.

This exhibit shows that to Cleveland and Lorain, coal can move river and rail from Warwood, W. Va., at a transportation cost of $1.42, which is 3 cents under the present all-rail rate from the Ohio No. 8 District, and 32 cents under the all-rail rate existing prior to August 1, 1932, and that from the Valley Camp Coal Company's mine at Moundsville, W. Va., coal can move river and rail to Cleveland and Lorain at a transportation cost equal to the present all-rail rate from the Ohio No. 8 District, and 29 cents lower than the pre-existing all-rail rate of $1.74. The river-rail charges to Canton and Massillon from both mines (1228) are lower than the old rate of $1.26 from the No. 8 District to those destinations.

According to the statement appearing at page 1335 of the report of the Chief of Engineers of the United States Army for the year 1930, the Monongahela River is navigable throughout the year except about five days annually on ac-

count of high water and ice below lock No. 7 and except for about 30 days annually above lock No. 7. My investigation develops that the ice has but little effect upon navigation in the Monongahela River between Pool 6 and Pittsburgh, due to the constant movement of the tow boats and barges through this section of the river which keeps the ice well [fol. 1608] broken up. My investigation has also developed that the section of the Ohio River from Pittsburgh to Moundsville is navigable throughout the year subject only to interruption from extreme floods, extreme droughts, and on rare occasions from ice. The lower Allegheny River is navigable throughout the year except during a period of about 30 days in the late winter or early spring. Some delays are caused by fogs, but these ordinarily do not constitute serious interruption to traffic.

I have made an investigation to determine the amount (1229) of river equipment on the Monongahela, Allegheny and Ohio Rivers available for the transportation of coal from the river mines along these rivers to the river ports of the carriers on the Ohio River, and have prepared a series of exhibits to show this river equipment.

Mr. Orcutt: Mr. Examiner, the respondents here object to this series of exhibits, consisting of six. The available river equipment has nothing to do with the reasonableness of interstate rates from Pennsylvania into Ohio or from the adjoining states into Ohio. The carriers that are shown and referred to in these next exhibits are not common carriers; they are not subject to the jurisdiction of the Commission, and their charges are no part of the through charges as published.

Exam. Trezise: Your objection will be noted, Mr. Orcutt. We will allow the exhibits to be introduced and received.

(1230-1243). (Argument had.)

[fol. 1609] (1244) The first of these exhibits No. 158, is a statement entitled "River Equipment of Union Barge Line Corporation in Use on Monongahela, Allegheny, Ohio, Kanawha, and Mississippi Rivers." The information contained on this exhibit is taken from a Government publication issued by the United States Department of Commerce in 1930, entitled, "Inland Waterway Freight Transportation Lines in the United States."

(Exhibit 158, Witness Durham, received in evidence.)

The Pittsburgh Coal Company and the Hillman Coal and Coke Company (through a subsidiary known as the Hillman Transportation Company) own and operate fleets of tow boats and barges by which they handle coal from their own mines on the Monongahela River and to the extent of their excess capacity sometimes handle coal from the mines of other operators. I have caused to be prepared an exhibit showing the (1245) river equipment of the Pittsburgh Coal Company from the Government publication which I have just mentioned, and I now desire to file it as the next exhibit, 159.

(Exhibit 159, Witness Durham, received in evidence.)

I have had prepared a similar exhibit covering the river equipment of the Hillman Transportation Company, and now desire to file it as the next exhibit, 160.

(Exhibit 160, Witness Durham, received in evidence.)

The information shown on this exhibit was furnished to [fol. 1610] me by the Hillman Transportation Company at my request in connection with our recent ex-river case.

There is other private equipment used in the transportation of coal from river mines on the Monongahela River to Ohio River ports. The shipments of coal from the mines of H. C. Frick Coke Company on the Monongahela River to Mingo Junction, Ohio, for rail movement to the American Steel & Wire Company at Cleveland, and to the National Tube Company at Lorain, are handled by the river equipment of the Carnegie Steel (1246) Company.

I have caused an exhibit to be prepared showing the equipment of the Carnegie Steel Company, and desire to file it as Exhibit 161.

(Exhibit 161, Witness Durham, received in evidence.)

This exhibit was prepared from the Government publication to which I have formerly referred, known as "Inland Waterway Freight Transportation Lines in the United States." I do not remember exactly whether the figures are for the year 1930 or some earlier year.

My investigation develops that there is ample river towing equipment in the Wheeling, W. Va., District for the movement of coal from the Ohio River mines to Martins

Ferry, Ohio, and other river ports on the Ohio River in the Ohio No. 8 District. I desire to submit a statement describing this equipment. This statement consists of two sheets, the first of which shows the propelling equipment [fol. 1611] and the (1246½) second the barge equipment in this territory. This is Exhibit 162.

(Exhibit 162, Witness Durham, received in evidence.)

I have made an investigation to determine the number and capacity of the transfer plants at the river ports along the Ohio River. The Pittsburgh & Lake Erie Railroad Company has recently put in operation a transfer plant at Colona, Pa., with a capacity of approximately 500 tons per hour, or 10,000 tons in a 20-hour day.

The Pennsylvania Railroad Company has recently installed a transfer plant at Conway, Pa., with a capacity of approximately 150 tons per hour, or 3,000 tons in a 20-hour day. The River Sand Company and the Eastern Ohio Sand and Supply Company each operates a transfer plant at Steubenville, Ohio, on the rails of the Pennsylvania Railroad. Each plant has a capacity of 100 tons per hour.

At Martins Ferry, Ohio, are two transfer plants located on the rails of the Wheeling and Lake Erie Railway. One of these is operated by the Belmont Supply Company, the other by the Wheeling Steel Corporation. Each has a capacity of 100 tons per hour, or 2,000 tons in a 20-hour day.

(1247) At Mingo Junction the Carnegie Steel Company owns two transfer plants suitable for the handling of ex-river coal which are served either directly or through reciprocal switching arrangements by the Wheeling and [fol. 1612] Lake Erie and the Pennsylvania Railroads. These two plants have a combined capacity sufficient to handle the coal requirements of the National Tube Company at South Lorain, and the American Steel & Wire Company at Cleveland. The plants of the Carnegie Steel Company are limited to the handling of coal destined to the Nation Tube Company and the American Steel & Wire Company. The plant of the Wheeling Steel Corporation has thus far been limited to the handling of coal from the Alexandria mine of the Valley Camp Coal Company. All of the other plants are available to the general public.

There are seven derrick boats available in the Wheeling, West Virginia District for the transferring of ex-river coal

from barges to railway cars. Each of these derrick boats has an average capacity of about 400 tons per hour. They can perform the service of transferring coal from river barges to railroad cars which are spotted on railroad tracks along the river bank near the water's edge.

(1248) The assembly service at the river ports at Martins Ferry and Mingo Junction is simpler and very much less expensive than the assembly service at the mines, but in other respects the transportation conditions of road haul and destination delivery are substantially the same, except that the average haul from the mines on our line in the Ohio No. 8 District to Cleveland, Lorain, Canton and Massillon, is about 15 miles shorter than the haul of the ex- [fol. 1613] river coal from Mingo Junction and Martins Ferry to the same destinations.

I heard the testimony of Mr. Triem, Superintendent of Transportation of the Pennsylvania Railroad, given in this hearing on December 15th, 1932. It is my recollection that he stated he knew of no such movement of ex-river coal from Mingo Junction to Cleveland over the lines of the Pennsylvania Railroad, but that he described how the coal would be handled if it were to move from Mingo Junction to Cleveland. The Pennsylvania Railroad Company, to my knowledge, handles such ex-river coal from Mingo Junction to Cleveland. (1249) The basis for my knowledge is that a part of the ex-river coal passing through a transfer plant on our line at Mingo Junction is switched to the Pennsylvania Railroad Company for road haul under our reciprocal switching arrangement at that point. This puts us in possession of information which enables me to check the number of cars of ex-river coal handled out of Mingo Junction to Cleveland via the lines of the Pennsylvania Railroad. I find that during the period from September 19, 1932, to December 14, 1932, inclusive, we have switched to the Pennsylvania Railroad Company at Mingo Junction 502 cars of ex-river coal consigned to Cleveland for road haul over the Pennsylvania Railroad. Referring to Mr. Kern's Exhibit 64, I think it is reasonable to expect that, if the present rate of $1.45 is increased substantially, the movement of coal from the Ohio No. 8 coal district to Cleveland [fol. 1614] and Lorain would shift to mines along the Ohio River in the Moundsville District of West Virginia and, perhaps to a lesser (1250) extent, to mines along the Ohio River on the Ohio side.

This view is supported by the following facts: Kern's Exhibit 64 shows that in 1929 the tonnage from the Ohio No. 8 District to Cleveland was 1,007,993 and to Lorain was 94,270, a total of 1,102,263 tons. My exhibit 144 shows that for the years 1926-1931, inclusive, the average annual movement of coal from the No. 8 District to Cleveland was 1,155,737 tons, and to Lorain 178,352 tons, a total of 1,334,089 tons.

As shown by the testimony of a previous witness, there are two mines in the Moundsville District in West Virginia which are now shipping ex-river coal. These are the Alexandria Mine operated by the Valley Camp Coal Company located at Moundsville, W. Va., with a daily capacity of 1,500 tons, and the Stop No. 6 mine of the Wheeling Coal Company or the Costanzo Coal Company at Warwood, W. Va., with a daily capacity of 2,200 tons. The combined daily capacity of these two mines is 3,700 tons, which is equivalent to 1,110,000 tons annually.

In addition to these two mines which are presently shipping ex-river coal in substantial quantities, there is another mine which is shipping a limited amount of river coal which is trucked from the mine to the river tipple and there dumped into barges. This is the Panama mine of the Ben [fol. 1615] Franklin Coal Company located at the southern boundary (1251) of Moundsville, W. Va., and about 13.1 miles south of Martins Ferry, Ohio. This mine has a daily capacity of approximately 1,100 tons, but probably not more than 600 tons per day could be dumped from its river tipple under the present method of operation.

Furthermore, there are two mines along the Ohio River in this territory which have river tipples now out of service, which were formerly used for the dumping of coal into river barges and which could readily be reconditioned. The first of these is the Shadyside mine of the Cambridge Collieries Company at Shadyside, Ohio, about 8.8 miles south of Martins Ferry, Ohio, which has a daily capacity of 600 tons. This mine has not been operated since April, 1931, but I am informed by the President of the Cambridge Collieries Company that it can be reopened upon two weeks' notice and could dump coal into river barges with a relatively small expenditure for the rehabilitation of its river tipple.

The other mine is the Gilchrist mine of the West Vir-

ginia & Pittsburgh Coal Company located north of Wellsburg, W. Va., about 14.4 miles north of Martins Ferry, Ohio. This mine, which has a daily capacity of approximately 1,000 tons, formerly shipped both by river and rail, but is now shipping by rail only, due to the partial destruction of its river tipple. This tipple could be rehabilitated [fol. 1616] at a (1252) moderate cost.

The total capacity of the five mines which I have mentioned is approximately 5,900 tons daily, or approximately 1,770,000 tons annually, which is substantially in excess of the total annual average shipments from the Ohio No. 8 District to Cleveland and Lorain during the six-year period 1926 to 1931, inclusive.

The total cost of barging this coal to Martins Ferry and transferring it to railroad cars at that point will not exceed 18 cents per ton, as has already been shown by the testimony in this case. The ex-river rate from Martins Ferry to Cleveland and Lorain is $1.27 per ton, making a maximum river-rail charge for the movement of this coal from mines along the Ohio River to Cleveland and Lorain of $1.45 per ton. If the coal formerly supplied to Cleveland and Lorain from the Ohio No. 8 District is diverted to these river mines, it will produce for the carriers only $1.27 per ton as compared with the present rate of $1.45 per ton from the Ohio No. 8 District to these destinations, a loss of 18 cents per ton which if applied against the total annual average tonnage of 1,334,089 will amount to $240,136.02 annually. This amount may properly be regarded as a saving or an increase in gross revenue due to the establishment of the rate of $1.45 to Cleveland and Lorain. [fol. 1617] Referring further to Mr. Kern's Exhibit 64, (1253) if the previous rate of $1.26 per ton is restored, I think it is reasonable to expect that the movement of coal from the Ohio No. 8 District to Canton and Massillon would also shift to the mines along the Ohio River.

Mr. Kern's Exhibit 64 shows that in 1929 the tonnage from the Ohio No. 8 District to Canton and East Canton, Ohio, was 198,043 tons, and to Massillon, Ohio, 20,199 tons, or a total of 218,242 tons. My exhibit 144 shows that for the years 1926 to 1931, inclusive, the average annual movement of coal from the Ohio No. 8 District to Canton was 268,600 tons, and to Massillon 39,969 tons, or a total of 308,569 tons.

The mines along the Ohio River to which I have referred have a capacity sufficient to supply Canton and Massillon with the annual average amount of coal which those cities have taken from the Ohio No. 8 District during the past six years, in addition to supplying Cleveland and Lorain with the annual average amount taken by them from the Ohio No. 8 District during the same period.

The ex-river rate from Martins Ferry to Canton and Massillon is $1.02 per ton, and the cost of barging coal from those (1254) mines to Martins Ferry and transferring it to railroad cars at that point, will not exceed 18 cents per ton, making the maximum river-rail charge for [fol. 1618] the movement of this coal from mines along the Ohio River to Canton and Massillon, $1.20 per ton or 6 cents less than the pre-existing rate of $1.26 per ton from the Ohio No. 8 District.

Referring to Kern's Exhibit 65, and his testimony relating thereto as to threatened revenue losses from the Crescent Districts to points in northeastern Ohio, in my opinion the effect of the continuance of the present rates from the Ohio No. 8, Middle and Massillon Districts to Cleveland and Lorain will result in increased net railway operating income for the carriers serving those districts. From the records compiled by the Ohio Bureau of Coal Statistics we find that during the years 1926 to 1931, inclusive, the average annual shipments of coal from these districts to Cleveland were 2,927,483 tons and to Lorain 1,344,107 tons.

From information furnished us by the American Steel & Wire Company, the Otis Steel Company and the Corrigan-McKinney Steel Company, we find that those companies received at Cleveland from the Pittsburgh, Fairmont and Connellsville Districts during the same period average annual shipments (1255) of coal for by-product coking purposes aggregating 1,568,935 net tons, and from information furnished us by the National Tube Company we find that that company received at South Lorain from the Pittsburgh, Fairmont and Connellsville Districts during the same period average annual shipments of coal [fol. 1619] for by-product coking purposes amounting to 1,049,410 net tons (including a small amount of gas coal).

Thus it will be seen that the average annual amount of coal received at Cleveland during this period from these

three districts for purposes other than by-product coking was 1,358,548 tons, and that at South Lorain the average amount received during the same period for purposes other than by-product coking was 294,697 tons. Those figures represent the annual average from 1926 to 1931 inclusive.

The Ohio districts produce no by-product coking coal. The by-product coking coal will, therefore, undoubtedly continue to move from Pittsburgh, Connellsville and Fairmont districts at the lowest transportation charges available to the shippers. The general purpose coal may be diverted to the Ohio No. 8 District. The lowest transportation charges available for the shipment of by-product coking (1256) coal from the coking coal districts of western Pennsylvania are those made possible by the ex-river rate of $1.27 per ton from Colona and Conway to Cleveland and Lorain, plus the towing charge of 25 cents per ton, and the lifting charge of 12 cents per ton, or a total of $1.64 per ton.

As shown by the testimony of Mr. Hoffacker, there is sufficient quantity of coal available at mines on the Allegheny and Monongahela Rivers of satisfactory character and quality to supply the demand for by-product coking coal at Cleveland and Lorain which heretofore has been [fol. 1620] met by all rail coal from the Pittsburgh, Connellsville and Fairmont Districts. There is also sufficient additional capacity at those mines to supply the general purpose coal shipped from these three districts to those destinations. If the general purpose coal is diverted to the Ohio No. 8 District, the carriers serving that district (which with the exception of the Wheeling and Lake Erie are the carriers which serve the Pittsburgh, Connellsville and/or Fairmont Districts) will receive a gross revenue thereon of $1.45 per ton.

However, if the present rate of $1.45 per ton from the Ohio No. 8 District to Cleveland and Lorain is increased to $1.74 per ton, the general purpose coal from the western Pennsylvania and northern West Virginia territory may be diverted to the river rather than to Ohio No. 8. In that case the carriers serving the river ports of Colona (1257) and Conway, namely, the Pittsburgh and Lake Erie and the Pennsylvania Railroads, will be able to secure a revenue of only $1.27 per ton on such ex-river coal, plus a charge of 12 cents per ton for transferring the coal from

barges to cars in the event it is handled through railroad transfer plants, or a total maximum gross revenue of $1.39 per ton. On the other hand, as I have stated, if the coal moves from the Ohio No. 8 District at the present rate, the carriers will secure a gross revenue of $1.45 per ton.

It is an interesting fact that approximately 74.28 per cent of all the coal received at Cleveland and Lorain (including South Lorain) from the Pittsburgh, Connellsville and Fairmont Districts, for by-product coking purposes, [fol. 1621] during the years 1926 to 1931, inclusive, was for the American Steel & Wire Company and the National Tube Company, and that the present practice of these companies is to have their coal moved from the mines of the H. C. Frick Coke Company, on the Monongahela River, by the fleet of the Carnegie Steel Company, to Mingo Junction, where it is transferred from barges to cars through the transfer facilities of the Carnegie Steel Company and moves by rail on the ex-river rate of $1.27 to Cleveland and Lorain.

Referring to the testimony of Messrs. Kern and Gilbert concerning the possible loss of revenue on coal formerly maving from the districts of southern (1258) West Virginia and eastern Kentucky to Cleveland and Lorain, certain of these districts such as Pocahontas, New River, and Tug River, produce low volatile coal. The remainder produce a high grade of high volatile coal. Since Ohio produces no low volatile coal, I am of the opinion that the movement of the low volatile coal will not be affected by the present rates from the Ohio No. 8 District. The records of the Ohio Bureau of Coal Statistics show that the average annual shipments from the low volatile fields to Cleveland and Lorain (including South Lorain) for the years 1926 to 1931, inclusive, were 1,722,559 tons, and that from the high volatile districts of southern West Virginia and eastern Kentucky the average annual shipments to Cleveland during the same period were 1,239,439 tons, and to Lorain (and South Lorain) 193,104 tons.

[fol. 1622] During the same period the average annual movement from these high volatile districts to Cleveland for by-product coking purposes as reported to us by the Corrigan-McKinney Steel Company amounted to 536,954 tons. No coal for by-product coking purposes was re-

ported to us by the National Tube Company as having been received at Lorain (South Lorain) from these districts. This by-product coking coal could not (1259) be supplied from the Ohio No. 8 District. This leaves the average annual amount of general purpose coal moving from these high volatile districts to Cleveland of 702,485 tons.

It is impossible for anyone to foretell whether the movement of the general purpose coal from the high volatile districts of southern West Virginia and eastern Kentucky will be affected, or to what extent, since that depends entirely upon whether the delivered price of the Ohio No. 8 coal at Cleveland, Lorain, Canton, Masillon and Akron is sufficiently low to compensate for the poorer quality of that coal as compared with coal from the high volatile districts of southern West Virginia and eastern Kentucky (taking into account mining costs as well as freight rates). The greater part of this southern coal moves into these destinations over routes embracing two or more lines of railroad. The delivering lines are in all instances the so-called Northern lines (that is, the Baltimore and Ohio Railroad, the New York Central Railroad, and the Pennsylvania Railroad) all [fol. 1623] of which are included in the Eastern District.

Exhibit 147, introduced by Mr. Eberhart, clearly shows that for the transportation services which they render on this Southern coal, these Northern carriers receive less gross revenue than on coal which they handle from mines on their lines in the No. 8 District to these (1260) destinations.

Mr. Day (interposing): Mr. Examiner, we want to renew our objection to injecting divisions into this record. We do not think that they are competent, material or relevant.

Exam. Trezise: Very well. Your objection is noted.

(Argument had.)

[fol. 1624] Witness (continuing): Thus the Pennsylvania Railroad Company receives a division of only 107.6 cents for hauling Big Sandy (1261) or Kanawha coal from Columbus to Cleveland, a distance of 170 miles, and the New York Central Railroad receives but 114.5 cents for hauling coal originating in these districts from Cincinnati to Cleveland, a distance of 243 miles. The Baltimore and Ohio Railroad receives but 131 cents for hauling Kenova coal from Columbus to Canton, a distance of 217 miles. The Baltimore and Ohio Railroad receives but 124.3 cents for haul-

ing Big Sandy or Kanawha coal from Columbus to Masillon, a distance of 193 miles, and the Baltimore and Ohio Railroad receives but 124.3 cents for hauling coal originating in the Thacker District from Columbus to Lorain, a distance of 208 miles. The Pennsylvania Railroad Company receives a division of only 88.4 cents for hauling coal originating in the Kenova District from Columbus to Akron, Ohio, a distance of 132 miles. These are typical of of the numerous divisions which are shown in that exhibit.

It is, therefore, apparent that if any substantial amount of coal is diverted from the southern West Virginia and eastern Kentucky Districts to the Ohio No. 8 District, such diversion will result in an increase of the aggregate gross revenues of the so-called Northern carriers. As all of these carriers are included in the Eastern District, it will likewise result in an increase in the aggregate gross reve-
[fol. 1625] nues of the carriers in that district.

It is true that such a diversion would result in a decrease (1262) in the aggregate gross revenues of the carriers in the Pocahontas Region, most of which serve these southern districts, as they will not share in the traffic so diverted. However, their rate of return is now, and for several years has been, substantially higher than the rate of return of the carriers in the Eastern District as will appear from the statement which I have caused to be prepared and desire to file as Exhibit 163.

(Exhibit 163, Witness Durham, received in evidence.)

This statement segregates the data for the Pocahontas Region from the data for the Eastern District, including the Pocahontas Region, shown on Sheet 1 of Monroe's Exhibit 85; it will be seen that for the years 1926 to 1931, inclusive, the rate of return on the total property investment of the Pocahontas lines and of the Eastern District, exclusive of the Pocahontas Region, was as follows:

Year	Pocahontas Region	Eastern District
1926	8.78%	5.16%
1927	7.75%	4.40%
1928	7.56%	4.82%
1929	8.55%	5.05%
1930	6.80%	3.27%
1931	5.36%	1.89%

[fol. 1626] (1263) For the first nine months of 1932, the rate of return on the total property investment of the Pocahontas Lines was 4.09% against 1.28% for the lines in the Eastern District excluding the Pocahontas Region.

Cross-examination.

By Mr. Bronson:

Referring to my Exhibit 162 or 163, by the Pocahontas Region, I mean the C. & O., Norfolk & Western, Virginian and the R., F. & P.

Testimony Taken at Washington, D. C., January 5, 1933

Cross-examination of Mr. Durham continued.

By Mr. Bull:

(1264) I do not have the figures now but can give them later as to the amount of special purpose coal moving from the Connellsville and Pittsburgh and Fairmont Districts separately to Cleveland and Lorain. (1265) We have some through routes and joint rates from Fairmont to Cleveland, Lorain, and so forth. I do not know of any movement to Lorain. Assuming we did have such a movement, if we got a car from Fairmont, handed to us at Orrville and going to Lorain, that would move in our regular trains from Orrville on. Those regular trains might be trains which handled our coal from the Ohio No. 8 district. We would not give the car from Fairmont any particular or any different handling from what we would give a car coming up from Ohio No. 8. (1266) In other words, after [fol. 1627] the Fairmont car was placed in the train at Orrville, the handling of that car to a specific consignee in Lorain would be no different from your handling of a car that happened to be in the same train, coming from Ohio No. 8 and going to that same consignee. I would say that is substantially true of any other junction point at which we might receive coal from Fairmont.

[fol. 1628] By Mr. Gutheim:

(1270) Rexford Hill, as it is called, extends from Odena to a few hundred feet west of Rexford. The summit is a few

hundred feet west of Rexford—west of the station shown on the map as Rexford. Pittsburgh Junction is approximately at the top of the hill.

The trains, the cost of which I have shown on my Exhibit 146, did not run intact from the No. 8 District to the final destinations shown. In all probability they were broken up enroute and the tonnage diverted to other destinations.

(1271) In my opinion, approximately all of the coal included in the cost study is Wheeling & Lake Erie originated coal. I would have to make a calculation as to what percentage the coal included in this study is of the total originated coal of the Wheeling & Lake Erie.

Referring to Exhibit 146, page 11, the Cuyahoga Valley Railway is an industrial common carrier, and also the Newburgh & South Shore. (1272) I think it is true that all the coal brought into Cleveland, by whatever carrier, that is delivered on the line of either of those two, necessarily involves a switching absorption by the inbound line. I doubt if the tonnages shown as handled by these respective railroads is an absolutely correct reflection of the relative terminal facilities of the railroads in Cleveland. My impression is that the New York Central possesses the greater [fol. 1629] part of the terminals in Cleveland. That is an impression, however, and I do not have the facts. (1273) If I did, I would guess that it is probably true that next to the New York Central, the Pennsylvania is probably the line with the more important terminals in Cleveland. I understand the New York Central is the system connection of the Pittsburgh & Lake Erie.

Referring to my Exhibit 156, I know of no other way in which the inland mines, that is mines not located on the river, of the Freeport, Pittsburgh or Connellsville Districts can compete in our northeastern Ohio territory to which the Wheeling has reduced its rates, except on all-rail rates such as shown here for the Pittsburgh District. (1274) It is correct that our inland Pittsburgh District mines in Cleveland and Lorain must compete with the ex-river mine or the river mine on a basis of $1.84 as against our total of $1.64 for the river mine; and also as against our all-rail rate of $1.45 from the No. 8 District to Cleveland. Also as against the river and rail combination from the No. 8 District mines located on the Ohio River in the vicinity of Wheeling to Cleveland. The Wheeling & Lake Erie ex-river

rates which we now have in effect, were established by the Wheeling voluntarily. (1275) The rates originally were published on a lower basis and suspended, and they were published on the present basis as a result of the findings of the Commission in I. & S. Docket 3619. It is true that to [fol. 1630] whatever extent our all-rail mines in the No. 8 District are now competing with our ex-river mines, they would have had more competition, with a more adverse freight rate against them, on the basis of the ex-river rates that we originally published, except to the extent that they might have been modified by excluding the Ohio River mines. We did not originally publish them excluding their application from the Ohio River mines; but in the hearing in I. & S. 3619 we agreed to restrict them to mines on the Monongahela and Allegheny Rivers, and the Examiner in his report recommended that.

I do not know how long the Ohio River mines had been in operation before we published those rates. I think they were in operation at that time, as were the Monongahela River mines, (1276) with respect particularly to the Alexandria mine of the Valley Camp Coal Company. When we published these ex-river rates, the purpose originally was to get gas and by-product coal not local to our railroad. Referring to the figures I gave, showing by-product coal received by certain steel companies of Cleveland and Lorain, those steel companies told me that coal was actually distilled in by-product ovens. I don't know where those particular steel companies get their steam coal supply. I know they burn steam coal.

The Wheeling & Lake Erie Railway Company owns the tracks at the private river transfer tipples over which the Costanzo coal and the other Ohio River coal was trans- [fol. 1631] ferred as shown by Mr. Vilas' exhibits yesterday. (1277) When we lift that coal out of the boat there is no other transportation facility used after that, except the facility that is owned by the Wheeling & Lake Erie.

When I stated that as a result of the changes in the rates the general purpose coal may be diverted to the Ohio No. 8 District, I mean all the railroads serving the Ohio No. 8 District, the trunk lines being those that also serve the western Pennsylvania districts, and the Wheeling & Lake Erie participating, to a very limited extent, in the rates on which coal is moving from the Pennsyl-

vania districts. We participate very little in the movement and in the rates. In a very few instances we also participated in the rates on coal from the P. & L. E. mines. (1278) We have very few destinations on the Wheeling to which P. L. E. coal moves. We get a small amount of coal from mines on the Pennsylvania. I am not sure about the Bessemer. I am not sure as to whether we have rates in connection with the Bessemer.

If we get a car of coal delivered to us at an interchange with the Pennsylvania and we thereafter have to move it from that interchange to a destination on our line, the service on that movement is approximately the same as for our own locally originated coal.

(1279) When the Frick coal moving down the river is transferred at the Mingo Junction tipples, part of it the Wheeling & Lake Erie hauls from that transfer point, and part of it the Wheeling & Lake Erie switches to the [fol. 1632] Pennsylvania for handling, and the Pennsylvania gets the road haul. There is an absorption by the Pennsylvania of the Wheeling & Lake Erie switching charges in that event.

None of these tracks which the Wheeling operates at these transfer tipples are tracks which are rented from steel companies or other shipper interests.

By Mr. Rogers:

Exhibit 146 was not made for the purpose of conveying to the Commission that the Wheeling & Lake Erie could cut their rates to meet the competition of the river traffic successfully. (1280) The purpose of that is to show the cost of transporting coal. I did not know that the Commission absolutely refused to subpœna any books, papers and documents of cost for this hearing. I don't know whether it would be advisable for the rest of them to put in costs, if the Wheeling & Lake Erie thinks it advisable, so that there would be a comparison. I think that, if they wanted to put in costs, they would probably do so. I don't know that they don't want to.

Our Division Superintendents do not make up any budgets. Our costs are based on our operations as they have been. We know that they come within our operating budget.

(1281) The purpose of this exhibit is just to show the cost of transporting coal. We do not keep any other

[fol. 1633] budgets on total freight. We have no separate information for other classes of freight. I cannot tell you specifically at this time how much profit we are making on any particular commodity, except as it is reflected in this cost study on coal; and this is correct. I could not get that information on other freight very easily. I would not be able to get it, except on order from the Commission. I don't know that the Commission won't ask for it.

By Mr. Gutheim:

(1282) We absorb no switching charge paid to an industry on any coal loaded along the river.

Now, specifically with respect to the transfer facility of the Carnegie Steel Company, it is located alongside the river, and my recollection is that we own track at that particular point—the siding on which the coal is loaded at the present transfer plant. There are two plants; one where the Carnegie Steel Company owns the track and one where, I think, we own the track. I will check that and definitely advise you later. At least, if we own it, we are paying no charge in connection with the handling of this coal. (1283) I stated in my direct testimony that our tariffs specifically provide that we will not absorb any terminal expense. As to letting you know if I find anything to the contrary, I can tell you now that we do not absorb any terminal expense; that is, so far as the Wheeling & Lake Erie is concerned, at any point along the Ohio River where we receive coal.

[fol. 1634] By Mr. Orcutt:

We do not pay the Carnegie Steel Company an allowance for moving these cars from the tracks on which they are loaded from the barges. We are not doing that, because the Carnegie Steel Company prefers to load the coal at any point. Our description in the ex-river case never contemplated paying the Carnegie Steel Company anything for handling coal. Our tariffs, as I have said, specifically provide that we will not absorb any expense of that kind at terminals.

By Mr. M. Carter Hall:

(1284) I have the basic data covering the study of our assembly service which resulted in the weighted average

distance given by me at page 974 of the Record as being 4½ miles. Unless counsel objects, we will furnish that to you today. We can furnish the total tonnage of coal moved by the Wheeling & Lake Erie during the years 1930 and 1931, from Ohio District No. 8 to the five points—Cleveland, Lorain, Canton, Huron and Massillon. I cannot furnish it to you now, but I will furnish it to you within the next 24 hours.

As to furnishing the total coal tonnage of the Wheeling & Lake Erie for the years 1930 and 1931, divided between all-rail and ex-river—that is an easy matter. Whatever coal tonnage we handled in 1930 and 1931 was all-rail. (1285) All we have to do is to look at our annual reports.

[fol. 1635] (1286-1287) (Mr. Hall also requested information as to total originated coal tonnage on the Wheeling & Lake Erie system for the years 1930 and 1931; which information Mr. Martin and the witness stated they would obtain; thereupon the witness was temporarily excused.)

[fol. 1636] W. Allison Richards was called as a witness and, having been duly sworn, testified as follows:

Direct examination.

By Mr. McVann:

(1287) My name is W. Allison Richards. I live in Bluefield, W. Va. I am President of the Ashland Coal & Coke Company, of the Majestic Collieries Company, of the Pemberton Coal & Coke Company and of the Sovereign-Pocahontas Company. (1288) These companies are engaged in the mining and shipment of coal. The Ashland Coal & Coke Company is located in the Pocahontas field, at Ashland, W. Va. The Majestic Collieries Company is located in the Williamson field, at Majestic, Ky. The Pemberton Coal & Coke Company is located in the Winding Gulf field, with mines at Affinity and Big Stick, W. Va. The Sovereign-Pocahontas Company is the distributing sales company for these mining operations and for others.

I am authorized to speak for other producers in this proceeding. I am a member of the Executive Committee of the Pocahontas Operators' Association, also of the same com-

mittee in the Operators' Association of the Williamson field and in the Winding Gulf Operators' Association. I am authorized to speak in this proceeding for the Pocahontas Operators' Association, and my testimony will deal particularly with that district. There are approximately 50 operating companies, with probably 125 mines in operation, in the Pocahontas field.

[fol. 1637] (1289) The Pocahontas field is located in southern West Virginia, to the east of the Williamson or Kenova-Thacker field, and is served by the lines of the Norfolk & Western Railway. The normal annual production of the field is about 28,000,000 tons, but the production in 1932 will not be over 18,000,000 tons. The operations of which I speak, in the Pocahontas field, are designated in the railroad tariffs as "Pocahontas" and "Tug River", and there were formerly two separate districts, but the operations in both of these districts are now comprised in the Pocahontas Association.

I have been operating mines and selling coal thirteen years. I have been familiar with the marketing conditions during all of the 13 years I have been engaged in producing coal, and I have been more intimately concerned and familiar with marketing conditions since the organization of our selling company, the Sovereign-Pocahontas Company, of which I am President, which was started in December of 1930.

The Pocahontas Operators' Association is one of the (1290) complainants represented by the Property Owners' Committee in Docket No. 25657, one of the cases in this proceeding. The complaint of the Pocahontas Operators' Association is made because of the disturbance of market conditions caused by the recent action of the Ohio railroads and the Ohio Commission in reducing the intrastate rates from the Ohio coal fields to certain destinations in north-[fol. 1638] eastern Ohio. For convenience in stating the matter, I will use Cleveland as an example. These reductions increase by 32 per cent the previous 90-cent differential against Pocahontas coal and in favor of Ohio No. 8, which differential of 90 cents was, in turn, 100 per cent greater than the large pre-war differential of 45 cents existing prior to 1915 and established by long years of usage.

I have made a survey, on behalf of the producers for whom I speak, of the present conditions in the markets for

our coal affected by the rate changes in this proceeding, because determination of the present and future effect of the latest increase in the differential against Pocahontas coal must be predicated upon such a survey of the marketing situation in the territory of destination with which we are concerned here. Cleveland is a very important city to us from a domestic coal standpoint, and Cleveland, Akron, Alkali-Painesville, Canton, Lorain and Massillon (1291) are important to us as large industrial coal consuming centers.

The outstanding characteristic revealed by this market survey is the astounding decline in the income of the people in these cities and the terrifically low level of operation in the iron and steel industry, which is the major business in the principal cities of northeastern Ohio. Internal Revenue Bureau statements show that individual incomes dropped in 1930 to 73 per cent of the 1928-1929 average, and declined further to 53 per cent in 1931. Present in- [fol. 1639] come tax collections of that Bureau, farm prices and statistics of industrial activity indicate that for 1932 the most optimistic estimate possible is but 38 per cent of the 1928-1929 average. Gross income from farm products, according to the reports of the Department of Agriculture, declined to 79 per cent in 1930 from the 1929 base, then dropped to 58 per cent in 1931 and to only 44 per cent in 1932. Production of pig iron, a basic product of the iron and steel industries in northeastern Ohio, declined to 75 per cent of the 1929 production in 1930, then sank to 43 per cent in 1931, and plunged on down to but 20 per cent in 1932.

This huge decline in the income of the people, unparalleled for severity of depth or duration, has so exhausted their resources as to rob them of their former ability to choose their fuel on the basis of quality preference. Because of the dire need of the difference, which must be expended for (1292) food, shelter, medicine, clothing and other necessities of life, price and price alone has become the governing factor in sales of domestic coal.

For metallurgical purposes in the iron and steel industry, the necessity for using low volatile coal such as that produced in the Pocahontas field, decreases proportionately with the rate of operation. Unfortunately for the Pocahontas producers, the necessity for fuel of low cost increases

inversely, at the same time, to the declining rate of operation.

[fol. 1640] To sum up, the present indices of business activity, wholesale prices, and forecasts of loadings for the first quarter of 1933 by the Regional Shippers Advisory Boards, all indicate that we may not look for any relief in early 1933 and that no substantial improvement is likely for many months to come.

I have made an investigation into the effect of the present and previous increases in the amount of the difference in the rates to northeastern Ohio, as between the Ohio districts and the Pocahontas field, and we find that the tonnage statements of the Norfolk & Western Railway show a decline for the first ten months of 1932 of 58.4 per cent in shipments to Cleveland, compared to the similar period in 1929; 91.6 per cent decline in shipments to Canton; 84.2 per cent decline in shipments to Lorain, and 89.6 per cent decline in shipments to Massillon. This amounts to virtual exclusion from the three cities last named.

(1293) Our investigation disclosed additional effects from these same causes. In our opinion, the Pocahontas field has suffered a grave injustice through the war-time increases in freight rates. We were burdened by heavy differentials prior to 1915 and the manner in which railroad rates as a whole were increased has generally doubled that burden.

Using Cleveland as an example, prior to 1915 the rate from the Ohio No. 8 field was 90 cents per ton, compared to $1.35 from Pocahontas, or a difference of 45 cents, which [fol. 1641] was 40 per cent of the mine-run price of the coal at that time. Subsequent advances and adjustments resulted in rates early in 1932 of $1.80 from Ohio No. 8 and $2.70 from Pocahontas, making the difference 90 cents per ton, an increase of 100 per cent. Today that differential is $1.19, or 120 per cent of the present value of mine-run coal.

The fact that the figures I have given are somewhat above the figures which have been used ordinarily in this proceeding, is because the figures of $2.70 and $1.80 include the surcharge, which accounts for the difference.

The need for domestic coal fluctuates with weather-conditions. (1294) For example, the average temperature in the Cleveland area for the month of October last year was 55.1 degrees, as compared to 58.5 degrees in 1931, and the temperature in November, 1932, was 40.4 degrees, compared to

51.2 degrees in 1931. These figures indicate that the need for heat in the Cleveland area during the two months of 1932 was 67 per cent greater than for the corresponding period of 1931.

Under the conditions which I have recited as to depression and decreased incomes in 1932 as compared with former years, the people of Ohio would turn to the cheapest coal that could be bought, which is, of course, the coal produced in the Ohio districts from which the rates have been substantially reduced.

[fol. 1642] During the year 1932 I have had contacts with the retail coal dealers in the northeastern Ohio section. I have had conferences with the retail coal board of the Cleveland Chamber of Commerce, representing retail coal dealers of Cleveland, on six separate occasions within the past twelve months for the purpose of discussing wages and means of preserving the business heretofore enjoyed by the smokeless (1295) coal fields in that city, and I may explain here that the smokeless fields are Pocahontas, New River and Winding Gulf.

These retailers have reported from time to time the trend of sales towards the cheapest coals offered for sale in Cleveland. Statistics of deliveries by 20 of the more important retail coal companies in Cleveland show that the deliveries of high volatile lump increased 50 per cent in the four months ended November 30, 1932, over the corresponding period of 1931, whereas smokeless coal, despite an increase of 67 per cent in the need for heat, shows an increase during that period of but 3 per cent. During the month of December our daily contact with the retail dealers in Cleveland indicated that this trend is not only continuing, but is increasing.

Operators in the Pocahontas field have lowered the price of industrial coal during the past nine months to an average of less than 10 per cent of the freight rate, in a desperate effort to save as much of their metallurgical market as possible. However, a difference against our coal of three times [fol. 1643] (1296) the price of that coal up to August 1st and four times the price thereafter, when the reductions with which we are dealing here were added to the old difference, resulted in the practical exclusion of this grade of our coal from Cleveland, Canton, Lorain and Massillon.

The facts given above show conclusively, in our judgment, that neither the people of northeastern Ohio nor the chief

industry of that section can, either at present or in the future, pay a delivered price for Pocahontas coal that will yield the mines in that field any profit after subtraction of the present freight rate, because of the ability of the northeast Ohio people and industries to buy competing fuels so much cheaper.

As I said in answer to a previous question, the serious decline in the income of people generally has so exhausted their resources as to rob them of their former ability to choose their domestic coal on the basis of quality preference. In other words, today the price of quality articles is the price of the cheapest article in the market, because (1297) that cheapest article sets the price for all other articles.

It will be absolutely impossible for the Pocahontas operators to regain their business in northeastern Ohio on a rate of $2.70 as against the rates now in effect of $1.51 from No. 8 and $1.66 from the Hocking field. Those figures include the surcharge.

[fol. 1644] We are operating several mines in the Winding Gulf field. The coal rate from that field to the northeastern Ohio territory is $2.70, the same as from the Pocahontas field. Low volatile coal, of the same general characteristics as the Pocahontas coal, is produced in the Winding Gulf field. The statements I have made as to Pocahontas coal in the markets of northeastern Ohio would be true also of Winding Gulf coal.

I am familiar with the kind of coal produced in the New River field. (1298) It is also a low volatile coal, of the same excellent general characteristics as the Winding Gulf and Pocahontas coal. The statements I have made are applicable alike to the Pocahontas, Winding Gulf and New River fields. The three make up the smokeless field of West Virginia, and the coals produced in all three of the districts are marketed under pretty much the same conditions.

Cross-examination.

By Mr. Ballard:

The figures of tonnage show a progressive decline since 1929 in shipments of our metallurgical coal to northeastern Ohio. Unfortunately for the Pocahontas operators, the use of low (1299) volatile coal in the iron and steel industry de-

clines in greater proportion than the decline in the rate of [fol. 1645] operation of the iron and steel industry because, first, of the need for low cost coal and the fact that the smokeless coal or Pocahontas coal is no longer a necessity in the operation of their by product plants because of its ability to reduce the coking time in the ovens. It becomes simply a competing fuel against any other grade of coal. I would say that the decline in the consumption of the Pocahontas coal is partly due to the decline in the rate of operation in the iron and steel industry, and also to the competing price of other coals on a delivered basis. I refer to all coals that can enter that market from any district, including No. 8 coal. I have no direct information as to the extent No. 8 coal has replaced Pocahontas coal for metallurgical purposes.

Referring to our domestic coal, the economic condition of the ultimate consumer has brought him to a point where price and price alone governs.

[fol. 1646] (1300) The difference between the Ohio No. 8 retail price in Cleveland and our Pocahontas price, which is roughly the smokeless coal price in Cleveland, is in the neighborhood of $3.25 a ton on a delivered basis. To put Pocahontas coal and No. 8 coal on a competitive basis, in my judgment, we would have to have a rate from the Pocahontas field that would be the sum of the present rate from the Ohio field plus the differential existing prior to April, 1915. The reason I answered the question that way was this: that in the case of your smokeless coals coming from a long distance you have in the markets of the country a degradation factor. That factor becomes more important with the rate. We have suffered (1301) an injustice because of the fact that our differentials have been increased over other coals, generally speaking, 100 per cent.

Assuming that you are a consumer and are in a position where price and price alone governs, and today you have to pay three dollars more for your coal than you do for No. 8 coal, I would say that differential would have to be reduced to less than $2.00, that is the retail price, so that the difference in price would be of no importance to you.

By Mr. McVann:

The smokeless coal is a friable coal. When shipped from the mines in prepared sizes it will yield from 10 to 20 per

cent degradation, which is breakage of the coal, at destina-
[fol. 1647] tion. That degradation has to be sold for steam purposes, and does not bring the price to the retailer that he can get for the corresponding and remaining prepared coal. That degradation takes place, a small part of it, in (1302) the actual loading of the coal into railroad cars, in transit, and in the detailer's handling of it in his yard.

By Mr. Keeler:

As to what degree of competition I had in mind when I answered the question as to the differential in price, I did not say "free competition". (1303) You cannot have competition as it existed prior to 1915 unless you restore 1915 conditions around the country. Any appreciable narrowing of the existing differential today, as between the low volatile coals and the coals mined in the Ohio districts, would improve the competitive situation as to those coals versus the Ohio coals.

By Mr. Burgess:

I stated the normal production of the Pocahontas field was 28,000,000 tons, and that in 1932 we would not run over 18,000,000 tons. For a normal year I was taking an average of the tonnage in 1928, 1929 and 1930. 1929 was an extraordinary good year in the iron and steel industry. I do not know how extraordinary 1928 was. It was certainly not a poor year. (1304) In 1932 the Pocahontas field was running approximately 65 per cent of normal production. The coal fields of the country generally were running less in 1932 than normal production of the years
[fol. 1648] 1928, 1929 and 1930. They were running about 15 per cent. In 1932 the iron and steel operations in northeastern Ohio were running about twenty per cent, as compared with 1928, 1929, and 1930. I do not have the actual figures on the plants at Canton and Massillon but I do know that the rate of operation was low. I cannot answer as to its being lower than it was at Cleveland.

In my direct I stated the main use of Pocahontas coal in Canton and Massillon is in the industries (1305), very largely for coking purposes. We are excluded for steam purposes on account of the price, and the nearness of the Ohio fields. I understand Canton and Massillon are right in the center of the Ohio coal production. I think it is cor-

rect that I referred to a reduction in shipments to Canton in the first ten months of 1932 of something like 91.6 per cent. I was comparing the same ten months' period in 1929 with that period of 1932. I believe the reduction in coal shipments to be lower for that ten month period in 1932 than in 1929 than the corresponding rate of operations of the coke ovens at Canton. I did not know that it had been testified in this record that since July 1, 1932, there have been no coke operations at all at either Canton or Massillon. (1306) I have come to the conclusion, that there has been a greater falling off in the use of Pocahontas coal at Canton than would result from the falling off in the coke oven operations at Canton, because it is a generally accepted fact in the by-product industry that with the rate of decline in the operation of the ovens the [fol. 1649] necessity for the use of low volatile coal diminishes. In other words, with the low volatile coals you get a quicker coking. They use about 20 per cent low volatile and 80 per cent high volatile. In 1928 and 1929 that would be the practice. Whenever a coke oven is pushed for tonnage, they use an increasing amount of low volatile coal. In 1932, very largely on account of the price, when the ovens are slowing up, there would be a tendency to use more and more high volatile and less low volatile coal.

(1307) In my judgment, the high volatile coking coal does not come from Ohio. There is not any of it in Ohio that I know of. I am not so sure that the Thacker field enters into the production of high volatile coal as largely as the other fields. I think the Connellsvile field is the main producing district for the high volatile coal. As far as coking is concerned, I understand it to be correct that the competition is between the high volatile and the low volatile coking coals.

(1308) The price in 1931 for our domestic Pocahontas coal, f. o. b. the mine, would vary according to the season of the year and according to size. The range probably was from $2.25 for lump and egg and stove coal to a maximum of $3.25 in October of that year. The low point would be April. The prices in 1932 were very much lower. They started at about $1.50 on lump and $1.75 on egg and stove in April, and reached a peak of $2.50 in October on the lump, $2.75 on the stove, $2.50 to $2.75 on the egg, and [fol. 1650] then, because of the diminished demand for the

prepared coals, prices since have broken to $1.75 and $2.00.

In the fall of 1931 the domestic price in Cleveland on lump and egg coal—which are very chiefly the sizes they take—was $8.50. This year the price is between $7.00 and $7.50, on the part of the more responsible dealers. The conditions existing in those two cities have been conducive to a good deal of substitution, and there are some broken prices on the part of irresponsible dealers. (1309) I mentioned two cities, but I meant to confine it to Cleveland. I do not know what the situation has been at Canton during the two periods in question. As far as domestic coal is concerned, Canton has never been an important domestic outlet for us. Massillon is even less important from our standpoint than Canton.

By Mr. Gutheim:

My understanding was that the rate from the Ohio field prior to April, 1915, was 90 cents per ton. The rate from the Pocahontas field was $1.35 per ton. That is a differential of 45 cents. The rates today are $1.51, including the surcharge from the Ohio No. 8 field, and $2.70 from the Pocahontas field. My 100 per cent increase, exactly, was prior to August 1, 1932, when the rate was $1.80. (1310) Prior to the recent reduction, I believe that differential went back to 1923. Since that time the mines in the territory for which I am speaking have increased their pro-
[fol. 1651] duction by many, many millions of tons. They increased it practically continuously up to 1929, and since 1929 everybody has slacked off.

Explaining my opinion as to the inability of the ultimate consumers, because of present economic conditions to burn high grade coal, I have looked into probably the most accurate facts that a man can adduce in coming to that conclusion. (1311) Among other things, there were the individual incomes as reported by the Bureau of Internal Revenue. The reports I studied were the reports that we received from our retail outlet. I have studied the figures; I gave you the figures. Some of these statistics showing the comparison of our shipments from the districts for which I speak into these northeastern Ohio destinations with previous years, are not yet available for the period in question. I have examined better statistics than those: the retail figures in the City of Cleveland. I have recently ex-

amined the statistics on the so-called poorer grades of coal, for those coals with which we come into competition, which are your high volatile coals. (1312) I have simply the totals for the high volatile section. I do not have the district figures separately. I have no figures, month by month, beginning last June, for our own districts into this Akron, Canton, Cleveland and Lorain territory, of domestic coal, and figures for competing districts. I have figures which led me to this conclusion with respect to Cleveland from the [fol. 1652] retail coal board of the Cleveland Chamber of Commerce. Cleveland is the city in northeastern Ohio which is of primary importance to us from a domestic delivery standpoint. We were not concerned with how much Pittsburgh coal had been sold in Cleveland to the domestic trade, month by month, as compared with the same months one, two or three years ago. We were simply concerned with the proposition that the ability of the people to pay high prices for fuel had ceased. I have no such figures for the individual districts, or such figures of our own Norfolk & Western District. (1313) I studied the figures available, which were for the entire smokeless area, including the Pocahontas field. I cannot give the figures for that area on coal which went to Cleveland, say, beginning in June, because I do not know how those figures of total production could possibly be segregated from the amount of all coal moving from Norfolk & Western mines. I made a comparison of the trend for previous years. I had the figures available for about 65 per cent of the retail coal merchants in Cleveland, and have those figures here.

They show that the Pocahontas coal, between the month of August, 1932, and November 30 of 1932, increased 3 per cent over a similar period in 1931, despite a 67 per cent increase in the need for heat. Your high volatile coal deliveries (1314) by these retail dealers during the same time increased 50 per cent over 1931. I do not take it as a premise in such a comparison that the ultimate consumer [fol. 1653] in his present economic situation is just as fussy about keeping warm as he always has been. The statistics of total coal production show that for a year such as 1932, when temperature conditions around the country have been 70 per cent, in some cases, colder than in a similar period last year, we have not gotten the measured reflection of the

same amount of coal that those temperature conditions should have taken. I have gotten a 3 per cent increase.

By Mr. Bronson:

As to its being true that Pocahontas and New River low volatile prepared coal sells in the City of Richmond, at retail, to the consumer, for domestic use, at approximately $4.00 per ton higher than similar Kanawha high volatile prepared domestic coal, which carries a 10-cent higher freight rate, approximately, I would say there are a great many coals in the Kanawha field. You have the Eagle seam coal in the Pocahontas field, which is very soft and friable and does not command as high a price (1315) as your Dorothea coal. So far as respects our own coal, I am familiar with the retail price cards gotten out by the dealers. I would say I am not prepared to answer the question to my knowledge, because I do not know which particular high volatile coals you have in mind. There is no uniformity about the prices charged by retail dealers in the City of Richmond. I know that your retailers in the City of Richmond handle a variety of high volatile coals, some of which [fol. 1654] come off the Norfolk & Western, as well as the C. & O., and there is a great range in the value at the mines. If it is true there is a great difference in the price of low volatile and high volatile coals in the City of Richmond, it is also true that we sell very little of our lump or egg coal in the City of Richmond. In my direct I stated I was speaking for New River too. (1316) There is a great deal of New River coal sold in Richmond, but of the small sizes. Your junior sizes sell for probably $1.50 less than the larger sizes.

By Mr. Martin:

I did not state how much of the low volatile coal moving into Cleveland, Lorain, Canton and Massillon, in terms of tonnage or percentage, was devoted to by-product use and how much to domestic use. I do not have those figures segregated. I do not know where you can get those actual statistics. I will say that largely our tonnages are industrial coal. By that I mean by-product coking coal. Neces-

sarily those prices have been affected by the acute depression in the steel industry that I have described.

(1317) I mentioned the value of low volatile coal in by-product coking, stating that it reduced the coking time. I believe it to be correct that it also has a great value in strengthening the structure of the coke.

[fol. 1655] The matter of degradation of the coal in transit, as well as in loading and unloading, would have no harmful effect whatsoever upon coal shipped for by-product coking purposes. As a matter of fact, they would take coal running not over an eighth of an inch, if you could ship it that way. I think it is the general practice that it is further pulverized by the coke ovens before being used.

I stated that in Cleveland there had been an increased need for heat of 67 per cent, and for the country as — whole 70 per cent, and I have obtained those results as follows: (1318) 65 degrees Fahrenheit is taken as the outside temperature at which the ordinary human being is comfortable. When the outside temperature drops, say, to 64 degrees, it is considered that the need for heat is one degree day, because the inside temperature of a house must be heated from the outside temperature of 64 degrees to 65 degrees. So, if your temperature in another day drops to 55 degrees, the inside of the house must be heated to bring that outside temperature up from 55 degrees to 65 degrees. That would be a 10-degree day. It is the same relationship as if you were to start your thermometer at 65 degrees and have readings from 65 on down, instead of from zero on up.

I believe I can give the figures which resulted in 67 per cent. The temperature in the Cleveland area averaged, for the month of October this year, 55.1 degrees. For the same month in 1931 it averaged 58.5 degrees. For the [fol. 1656] month of November it averaged 40.4 degrees in 1932 and 51.2 degrees in 1931.

Now, multiplying the difference between the 65 degrees and those monthly temperatures gives you the total number of degree days. To save calculation, those degree days were 306.9 for October of 1932, 201.5 for October of 1931, (1319) 738 for November of 1932 and 414 for November of 1931. That makes a total for 1932, for those two months, of 1,044.9, and for the same two months of 1931, 624.5, the increase being 67 per cent.

By Mr. Orcutt:

In response to a question by Mr. Gutheim, I stated the producers in the Pocahontas field had increased their capacity very materially since 1923. That capacity was not increased to take care of the domestic trade north of the Ohio River; it was the general demand for coal around the country. As a matter of fact, the demand for domestic coal did not grow proportionately with the industrial demand. That included every market, including lake cargo. I do not think that the northeastern Ohio domestic market has enjoyed a proportional increase with the balance of our market.

I think, as I stated in answer to Mr. Burgess, that the percentage the Pocahontas mines were operating today, as compared with 1929, was about 65 per cent (1320), and that other fields were operating, roughly, about 55 per cent. I do not know what the Ohio fields percentage is. I know [fol. 1657] that generally there has been a better relationship to prior year figures since the first of November of 1932 than for the prior ten months of the year; and I presume that that includes all fields. I do not have the figures as to whether the No. 8 District has moved more coal into northeastern Ohio in 1932 than it did in 1929. In giving the figure of 20 per cent relationship in connection with the steel business, I had reference to 20 per cent of the 1929 production.

By Mr. Ballard:

In regard to my original statement that price and price alone governed being confined to a condition of free competition, and whether I have not taken a modified position that no differential would wholly exclude us—I do not know that my position has been modified in any respect whatsoever. (1321) We are dealing with the future, rather than with the historical past, and we are dealing with conditions today which did not obtain in those prior years. The future is extremely uncertain to everybody. Not only coal producers, but the producers of a great many commodities, have found out that, so far as present conditions are concerned among the people because of lack of income, quality products cannot command a higher price today such as they formerly enjoyed—or a differential—because simply of the

inability of the people to pay the extra money for quality products. In making that statement I am referring to the present and the future.

[fol. 1658] As to what price differential I have in mind when I say that quality products cannot compete with the ordinary products beyond a certain price differential—to the best of my judgment, we probably would have to have a reduction in the delivered price in the Cleveland (1322) area in excess of one-third of our present differential, which I understand to be $3.00 to $3.25. I think we are rapidly losing that market. My best judgment is that we will find ourselves in the position of having lost it entirely unless such a reduction of the price spread can be brought about.

The retail prices I gave in Cleveland in 1932 as $7.00 and $7.50, were cash prices. They were the prices of the retail merchants. It was our coal. We are not in the retail business and have no retail prices.

(1323) I cannot give you the information how much low volatile coal was shipped to Cleveland in 1931. I do not happen to have it. I would be willing to furnish that for the record.

Mr. McVann: That is already in the record in Kennedy's Exhibit 145, showing separately by districts the tonnage of Winding Gulf, Tug River and New River District coal destined to Cleveland for 1929, 1930, 1931 and the ten months of 1932.

(Narrative continued:)

I do not have the figure with me, but I will be glad to have it made up, as to what percentage of the output of the districts for which I am testifying went to northeastern Ohio in 1931.

[fol. 1659] The prices of irresponsible dealers for Pocahontas coal in Cleveland recently would range, possibly, $1.00 under the prices I have given.

Redirect examination.

By Mr. McVann:

(1324) When the prepared size price was $2.50 or $3.00, the price of slack coal was very low. We received, both in

1931 and 1932, very low prices for our slack coal during the summer season. When I say "we", I mean the Pocahontas operators generally. Those prices would range from a price originally running from 75 cents to $1.00 at the start of the contract season to prices made in expectation of receiving a percentage of the normal prepared coal demand in the fall on down to as low as 25 cents in the fall of 1931 and to 15 cents this fall.

It is correct that I mentioned the character of Pocahontas coals being very soft and friable. (1325) The slack produced in that field from the separation of sizes to which I have referred will run between 60 and 70 per cent of the total production. That is the character of coal that goes into metallurgical use.

There has been a great deal of domestic coal purchased throughout the entire West by municipalities or other charitable agencies for use in periods of depression. I have no particular figures on the area involved in this case, as to the cities in northeastern Ohio. I know that has been done generally throughout the West, and I believe it has [fol. 1660] been done in Cleveland. However, I have no figures on it.

The terms I have used in reference to temperature "need for heat", "degree days", and so on, are a part of the equipment of sales people handling domestic coal. (1326) They are obliged to be informed about those things. It is the only intelligent way that I know of to approximate your market consumption of domestic coal. In giving figures I gave in my direct testimony I was using the terms ordinarily used in conveying such information. Those figures are official Government figures from the Weather Bureau at Cleveland.

Recross-examination.

By Mr. Burgess:

The prices I gave for slack coal in 1931 and 1932 was for such coal sold for metallurgical purposes. In 1929 we were getting a much better price for that coal.

By Mr. Henry C. Hall:

(1327) By an irresponsible dealer, I mean a man who has no investment and no office, and simply a telephone,

and who has no financial bank account and simply solicits business on a "snow bird basis", as we call it, and who substitutes other fuels for the coal that he is supposed to deliver, and who is in no way financially or morally responsible. Cutting of prices is a feature of an irresponsible dealer's methods. A man could be a responsible dealer and still cut prices, but he would not sell one thing under the name of another, nor would he give short weight or anything of that sort. (1328) That is another feature of irre- [fol. 1661] sponsibility. The pressure of substitution around the whole country—not necessarily confined to the area here under discussion, is tremendous today. I mean substitution of low valued products for higher valued products. That is true even in the case of cigarettes. Cigarette-makers have been forced to reduce their prices very largely because of the prices of the cheaper cigarettes this year.

[fol. 1662] H. J. ADELL was called as a witness and, having — duly sworn, testified as follows:

Direct examination.

By Mr. Martin:

(1329) My name is H. J. Adell, address Cleveland; occupation chief clerk, General Traffic Department, The Wheeling & Lake Erie Railway Company. I have held that position about 2½ years. I have been with The Wheeling & Lake Erie Railway Company for more than fourteen years and have spent the entire period of that time in the General Traffic Department. I started in as office boy and was advanced to the positions of rate clerk, tariff compiler, chief rate clerk, assistant chief clerk and chief clerk.

I am familiar with the issues in this proceeding (1330) and have caused to be prepared, under my personal supervision, a number of exhibits containing statements of mileages and rate comparisons which I am now about to introduce. All of these exhibits are correct to the best of my knowledge and belief. They include a series of exhibits showing distances from mines in the Ohio No. 8, Middle and Massillon Districts to Cleveland, Lorain, Huron, Akron, Canton and Massillon.

My first exhibit, 164, is a statement consisting of four sheets, showing average distances via The Wheeling and Lake Erie Railway from mining points in the No. 8 Middle and Massillon Districts of Ohio, to Cleveland, Lorain, Huron, and Akron, Ohio. When I speak of Lorain throughout my testimony, I mean to include South Lorain, unless otherwise noted.

[fol. 1663] The first sheet of this exhibit is a recapitulation. The second sheet shows in detail the mileages from mining points on the Wheeling and Lake Erie Railway in the No. 8 District of Ohio to Cleveland, Lorain, Huron and Akron. These mining points are taken from The Wheeling and Lake Erie Railway Company's (1331) current list of coal mines and operators No. 16.

As shown by the note at the bottom of sheet 2, mileages were computed over the shortest possible route over the Wheeling and Lake Erie Railway from mining points to destinations, using Wheeling and Lake Erie Engineering Department mileages for distances from mining points to the first station en route to destination and Wheeling and Lake Erie mileage tariff, I. C. C. 1713 for distances from stations to destinations.

Mileages to Akron were computed via Mogadore and the Akron, Canton & Youngstown Railway, and A. C. & Y. Mileage Tariff I. C. C. 326, was used for distances beyond Mogadore, Ohio.

Sheet 3 relates to mining points in the Middle District and in other respects is the same as Sheet No. 2.

Sheet 4 relates to the one mine in the Massillon District and is prepared in the same manner as sheets 2 and 3.

As shown by Sheet 1 of this exhibit, the average distances from mining points on The Wheeling and Lake Erie Railway via The Wheeling and Lake Erie Railway are as follows:

[fol. 1664] From No. 8 District to Cleveland, 135.8 miles; to Lorain, 137.8 miles; to Huron, 148.8 miles; and to Akron, Ohio, 103.7 miles.

I used the railway's list of coal mines and operators as a basis for my list of mining points shown in this exhibit (1332) because recent decisions of the Interstate Commerce Commission, particularly in Intrastate Rates on Bituminous Coal between points in Illinois, Docket No. 23130, 182 I. C. C. 537, and Coal Trade Association of Indiana vs. The Baltimore & Ohio Railroad Company, et al., Docket

No. 23922 (Sub. No. 2), 185 I. C. C. 225, state in effect that the distances shall be computed from mining points.

The coal tariffs of the carriers include as points of origin both mines and stations, and in some instances the stations shown in the tariff are not mining points. We, therefore, concluded that the more accurate list of such mining points for use in these exhibits would be the current list of coal mines and operators of our company and this was used as the basis for my Exhibit 164.

(Exhibit 164, Witness Adell, received in evidence.)

My next exhibit, 165, is a statement consisting of 6 sheets, showing the average distance via The Wheeling and Lake Erie Railway from mines and shipping points on The Wheeling and Lake Erie Railway in the No. 8, Middle and Massillon Districts of Ohio, to Cleveland, Lorain, Huron and Akron, Ohio.

[fol. 1665] This is similar in all respects to my Exhibit 164, except that instead of using mining points shown in the current list of coal mines and operators, we have used the mines and shipping points shown in F. V. Davis' Tariff I. C. C. No. 48.

(1333) The mileages shown on this exhibit are those which were used by The Wheeling and Lake Erie Railway in establishing its rates from the Ohio No. 8, Middle and Massillon Districts to Cleveland, Lorain, Huron and Akron, and intermediate points under the special permission order of the Public Utilities Commission of Ohio, dated July 20, 1932, as amended July 21, 1932, in its special permission Docket No. 6492.

The mileages shown on the first sheet of this exhibit differ only slightly from the mileages shown on the first sheet of my Exhibit 164.

Thus, the mileage from the Ohio No. 8 District to Cleveland, Ohio, is 136.2 miles; to Lorain, Ohio, 138.2 miles; to Huron, Ohio, 149.2 miles; and to Akron, Ohio, 104 miles.

In the case of both exhibits the mileages to the respective destinations from the respective origin districts fall within the same blocks of the 23922 scale with the single exception of the distance from the Massillon District to Huron. The discrepancy is due to the fact that the tariff names eight mines and shipping points in the Massillon District, while

[fol. 1666] actually there is but one mine in that district. This illustrates one of the reasons why, in my opinion, the mining list affords the most accurate basis for determining mining points from which mileages should be computed.

(Exhibit 165, Witness Adell, received in evidence.)

My next exhibit, 166, is a statement consisting (1334) of four sheets showing the average distance via The Wheeling and Lake Erie Railway from active mines on The Wheeling and Lake Erie Railway in the No. 8, Middle and Massillon Districts of Ohio, to Cleveland, Lorain, Huron and Akron, Ohio.

As shown by the note on Sheet 1 of the exhibit, the term active mines as here used means mines which shipped bituminous coal, in carloads, via railroad, during the period from July 1, 1931, to September 15, 1932, inclusive, as shown in Mr. Kern's Exhibit 35.

In most cases these mileages are less than those shown in the two preceding exhibits. Thus the mileages from the Ohio No. 8 District shown in this exhibit are: To Cleveland, 131.9 miles; to Lorain, 133.9 miles; to Huron, 144.9 miles; and to Akron, 99.8 miles.

(Exhibit 166, Witness Adell, received in evidence.)

My next exhibit, 167, is a statement consisting of seven sheets showing the average distances via the Wheeling and Lake Erie Railway from mines and shipping points on the [fol. 1667] Wheeling and Lake Erie Railway in the No. 8, Middle and Massillon Districts of Ohio to Cleveland, Lorain, Huron and Akron, Ohio.

This exhibit is similar in all respects to my exhibit 165, except that the mileages have been computed from the billing stations shown in F. V. Davis' Tariff I. C. C. No. 48, while in Exhibit 165, the distances from the mines were computed from the mine tipples. The differences in the results obtained (1335) by the two methods are very slight, as will be noted by a comparison of Sheet 1 of this exhibit with Sheet 1 of Exhibit 165.

(Exhibit 167, Witness Adell, received in evidence.)

All the distances on that exhibit are from the billing stations, and carry a note to that effect. Where the note does not appear, it is a station.

My next exhibit 168, consisting of a single sheet, is a recapitulation of the mileages shown on the four preceding exhibits, 164, 165, 166 and 167, and a comparison of the mileages derived by the application of the four formulas I have described. The exhibit shows that with the possible exception of the active mine formula there is little variation among the mileages, no matter which formula is used. The use of any of these formulas, except the active mine formula for the establishment of our reduced rates, would have produced the same result.

(Exhibit 168, Witness Adell, received in evidence.)

(1336) The next four exhibits are similar to the first [fol. 1668] four introduced, except that the destinations shown are Canton and Massillon, Ohio.

The first of these exhibits, which will be Exhibit 169, is a statement consisting of four sheets, showing the average distances via the Wheeling and Lake Erie Railway from mining points on the Wheeling & Lake Erie Railway in the No. 8, Middle and Massillon Districts of Ohio, to Canton and Massillon, Ohio.

It is prepared in the same manner as my Exhibit 164, that is to say, the mining points shown are taken from the Railway Company's current list of coal mines and operators.

(Exhibit 169, Witness Adell, received in evidence.)

My next exhibit, 170, is a statement consisting of six sheets, showing the average distances via the Wheeling & Lake Erie Railway from mines and shipping points on the Wheeling & Lake Erie Railway in the No. 8, Middle and Massillon districts of Ohio, to Canton and Massillon, Ohio. This exhibit is prepared in the same manner as my Exhibit 165, the list of mines and shipping points being taken from F. V. Davis' I. C. C. No. 48.

(Exhibit 170, Witness Adell, received in evidence.)

I next introduce as Exhibit 171 a statement consisting of four sheets, showing the average distances via the Wheeling & Lake Erie Railway from active mines on the Wheeling & Lake Erie Railway in the No. 8, Middle and Massillon (1337) districts of Ohio, to Canton and Mas-

sillon, Ohio, which is similar in form to my Exhibit No. 166.

[fol. 1669] (Exhibit 171, Witness Adell, received in evidence.)

The next exhibit, 172, consisting of six sheets, is entitled Statement Showing Average Distance via the Wheeling & Lake Erie Railway from mines and shipping points on the Wheeling & Lake Erie Railway in the No. 8, Middle and Massillon Districts of Ohio, to Canton and Massillon, Ohio.

It is prepared in the same manner as Exhibit No. 167, that is to say, the mileages have been computed from billing stations shown in the tariff instead of from the tipples.

(Exhibit 172, Witness Adell, received in evidence.)

I next desire to introduce an exhibit as 173, consisting of one sheet, containing a recapitulation and comparison of the mileages via the Wheeling & Lake Erie Railway from the No. 8, Middle and Massillon districts to Canton and Massillon, Ohio, shown on the four preceding exhibits, 169, 170, 171, and 172.

This exhibit is prepared in the same manner as my exhibit 168. It shows that all of the formulas produce approximately the same results, except the active mine formula as to the Middle district.

(Exhibit 173, Witness Adell, received in evidence.)

(1338) My next three exhibits relate to short tariff routes from the Ohio No. 8 District to Cleveland, Lorain, Huron and Akron, Ohio. The first of these, which I shall introduce as Exhibit 174, is made up of seven sheets, and shows the average distances via the shortest existing tariff [fol. 1670] routes from mining points in the No. 8 District of Ohio on the Wheeling & Lake Erie Railway, Pittsburgh & West Virginia Railway, New York Central Railroad, Baltimore & Ohio Railroad, and the Pennsylvania Railroad, to Cleveland, Lorain, Huron and Akron.

Mining points used as the basis for the computation of mileages for this exhibit are taken from the current mining lists of the carriers which I have mentioned, with the exception of the mining points on the Pennsylvania Railroad. These were taken from the lists of mines on the

Pennsylvania Railroad shown in F. V. Davis' Tariff, I. C. C. No. 48, as the Pennsylvania Railroad segregates these mines from its shipping points in this tariff. Furthermore, its mining list is several years old and is probably now obsolete.

The average distances to Cleveland and Akron are substantially the same as those from Wheeling & Lake Erie mining points via the Wheeling & Lake Erie Railway, but as to Lorain and Huron the averages of the short tariff routes substantially exceed the mileages via the Wheeling & Lake Erie direct, due to the abnormally circuitous routes of the Baltimore & Ohio and Pennsylvania Railroads to both destinations.

(1339) The short tariff route from Maher No. 6 Mine on the Baltimore & Ohio to Lorain, Ohio, is 163.1 miles, while the Wheeling & Lake Erie distance is 153 miles, a differ- [fok 1671] ence of approximately 10 miles between the short tariff route distance of the Baltimore & Ohio and the distance of the Wheeling & Lake Erie Railway direct.

To Huron, Ohio, the short tariff route distance of the Baltimore & Ohio is 181.8 miles, while the distance of the Wheeling & Lake Erie direct is 164 miles, a difference of approximately 17 miles.

From Maher No. 9, on the Baltimore & Ohio to Lorain, Ohio, the short tariff route is 164.5 miles, while the Wheeling & Lake Erie direct route is 151 miles, a difference of approximately 13 miles.

From the same mine to Huron, Ohio, the Baltimore & Ohio short tariff route distance is 183.2 miles, while the Wheeling & Lake Erie direct route is 151 miles, a difference of approximately 21 miles. (1340) The short tariff route from Budd Mine on the Pennsylvania Railroad to Lorain, Ohio, is 151.4 miles, while the Wheeling & Lake Erie direct route from the same mine is 145 miles via the Wheeling direct, a difference of 6.4 miles.

To Huron, Ohio, from the same mine the Pennsylvania Railroad short tariff route distance is 227.2 miles, while the Wheeling & Lake Erie direct distance is 156 miles, a difference of 71.2 miles.

From Dorothy Mine on the Pennsylvania Railroad the short tariff route of the Pennsylvania Railroad to Lorain, Ohio, is 153.4 miles, while the Wheeling & Lake Erie direct distance is 148 miles, a difference of 5.4 miles.

[fol. 1672] From the same mine to Huron, Ohio, the Pennsylvania short tariff route distance is 229.2 miles, while the Wheeling & (1341) Lake Erie direct distance is 159 miles, a difference of 70.2 miles.

The circuity is much more pronounced in connection with the routes to Huron than it is to Lorain. The Pennsylvania short tariff route to Huron, Ohio, is very circuitous from most of the mines on their line in the No. 8 District. That has a vital effect in bringing up the mileage from the district to Huron on short tariff routes to 174.7 miles.

Each of the mines I have mentioned are joint mines on the railroads I have named.

I have finished discussing Exhibit 174.

(Exhibit 174, Witness Adell, received in evidence.)

(1342) The second exhibit of this group, which will be exhibit 175, consists of nine sheets. It is based on mines and shipping points shown in the Davis tariff. The average mileages are substantially the same as in the preceding exhibit.

(Exhibit 175, Witness Adell, received in evidence.)

I now introduce the third exhibit of this series as 176. This exhibit contains six sheets and is entitled "Statement Showing Average Distances via Shortest Existing Tariff Routes from Active Mines in the No. 8 District of Ohio on the Wheeling & Lake Erie Railway, Pittsburgh & West Virginia Railway, New York Central Railroad, Baltimore & Ohio Railroad, and the Pennsylvania Railroad to Cleveland, Lorain, Huron, and Akron, Ohio."

[fol. 1673] This exhibit shows that by using active mines as the basis the resulting mileages are considerably shorter than the mileages computed on the basis of mines shown in the mining list as in Exhibit 174, or on the basis of mines and shipping points shown in the Davis Tariff, as in Exhibit 175. The active mines used in this exhibit are taken from Mr. Kern's Exhibit 35.

(Exhibit 176, Witness Adell, received in evidence.)

(1343) I have prepared and introduced these exhibits showing mileages for shortest existing tariff routes on the various formulas which I have selected, because the Inter-

state Commerce Commission in recent decisions has used this particular formula. By that I mean the short tariff route formula, in connection with rates on coal from various origin districts to various destinations.

I can cite some of the cases in which the Commission has approved that formula.

Coal Trade Association of Indiana vs. Baltimore & Ohio Railroad Company et al., I. C. C. Docket 23922, 185 I. C. C. 225.

(1344) Intrastate Rates on Bituminous Coal between points in Illinois, I. C. C. Docket 23130, 182 I. C. C. 537, and 182 I. C. C. 603.

Board of Railroad Commissioners of the State of Iowa vs. Alton & Southern Illinois Railroad, et al., I .C. C. Docket No. 15228, 128 I. C. C. 293.

Frank B. Clinton, et al., vs. Baltimore & Ohio Railroad Company, et al., I. C. C. Docket 20965, 167 I. C. C. 294.

[fol. 1674] Majestic Coal Mining Company vs. Atchison, Topeka & Santa Fe Railway Company, et al., I. C. C. Docket 21938, 163 I. C. C. 605.

Matt-Schnaibel Coal Company, et al., vs. Chicago & Eastern Illinois Railway Company, et al., I. C. C. Docket 21688, 167 I. C. C. 530.

Illinois Coal Traffic Bureau vs. Alton & Southern Illinois Railroad, et al., I. C. C. Docket 16340, 128 I. C. C. 265.

Those are the most important decisions.

(1345) Where I have been showing the short tariff routes, the individual sheets cover mines on the roads shown in the heading, whether they are joint with another line or otherwise. We consider them on that particular road.

I now desire to introduce three more exhibits similar to the last three introduced, except that they show the average distances from the middle district to Cleveland, Lorain, Huron and Akron, Ohio.

The first of these, consisting of six sheets, which will be 177, shows the average distances via shortest existing tariff routes from mining points on the Wheeling & Lake Erie Railway, Baltimore & Ohio Railroad, New York Central Railroad and Pennsylvania Railroad to the four destina-

tions. Mining points used as the basis for the computation [fol. 1675] of mileages for this exhibit are taken from the current mining lists of the carriers, which I have mentioned, with the exception of the (1346) mining points on the Pennsylvania Railroad. These were taken from the list of mines as shown in F. V. Davis' I. C. C. No. 48.

The same circuitous routes of the Baltimore & Ohio Railroad or the Pennsylvania Railroad to Huron exist from mines in the Middle District as are shown from mines in the No. 8 District. I do not have any specific examples, but I believe Mr. Eldridge's testimony will show those examples very clearly.

(Exhibit 177, Witness Adell, received in evidence.)

The next exhibit, containing nine sheets, which will be Exhibit 178, shows the average distances via the shortest existing tariff routes to the four destinations from mines and shipping points on these railroads shown in Davis' tariff.

(Exhibit 178, Witness Adell, received in evidence.)

The third exhibit, consisting of five sheets, which will be Exhibit 179, shows the average distances via the shortest existing tariff routes from active mines in this district. (1347) The list of active mines was taken from Mr. Kern's Exhibit 35.

(Exhibit 179, Witness Adell, received in evidence.)

The next group of three exhibits relate to the shortest tariff routes from the Massillon District to Cleveland, Loyain, Huron, and Akron, Ohio. The first of these, con- [fol. 1676] taining three sheets, which will be Exhibit 180, is based on the mining points as shown in the mining lists of the carriers, with the exception of the Pennsylvania Railroad mines, which have been taken from the list in the Davis tariff.

(Exhibit 180, Witness Adell, received in evidence.)

The second exhibit in this group, which will be Exhibit 181, contains four sheets, and shows the average distances via shortest existing tariff routes from mines and shipping points in the Massillon Disfrict to these four destinations.

(Exhibit 181, Witness Adell, received in evidence.)

The third exhibit in the group, consisting of one sheet, which will be Exhibit 182, shows the shortest existing tariff route from the single active mine in this district to the four destinations.

(Exhibit 182, Witness Adell, received in evidence.)

(1348) I have prepared a statement recapitulating and comparing the mileages shown on my last nine exhibits, and desire to file it as the next exhibit, 183.

(Exhibit 183, Witness Adell, received in evidence.)

This statement shows a comparison of the average distances via shortest existing tariff routes from the No. 8, Middle and Massillon Districts of Ohio to Cleveland, Lorain, Huron and Akron, using the three formulas upon which the last nine exhibits are based. This exhibit shows that as a general rule the short tariff routes from the [fol. 1677] active mines to the four destinations here shown are substantially less than the average distances from the mining points or from the mines and shipping points to the same destinations.

Using the 23922 scale as a basis of measurement, the average short tariff routes from the active mines in the No. 8 District to Cleveland would indicate a rate of $1.40; to Lorain, a rate of $1.45; to Huron, a rate of $1.65; and to Akron, a rate of $1.22, instead of the existing rate of $1.45 to Cleveland and Lorain, $1.55 to Huron and $1.28 to Akron. It will be also noted that from the middle and Massillon districts the 23922 scale applied on the active mine formula would produce in most cases substantially lower rates than those in effect at the present time.

My next group of three exhibits relate to the average distances via shortest existing tariff routes from the No. 8 District (1349) to Canton and Massillon. The first exhibit of this group, 184, consisting of seven sheets, is based on mining points taken from mining lists of carriers, other than the Pennsylvania Railroad, and from that company's list of mines in the Davis tariff.

(Exhibit 184, Witness Adell, received in evidence.)

The next exhibit, 185, consisting of nine sheets, is a

similar exhibit, except that it is based upon the mines and shipping points shown in the Davis tariff.

(Exhibit 185, Witness Adell, received in evidence.)

The next exhibit, 186, consisting of six sheets, is based upon the active mines in the No. 8 District, as shown in Mr. Kern's Exhibit 35.

[fol. 1678] (Exhibit 186, Witness Adell, received in evidence.)

The next three exhibits constitute a similar group of exhibits from the middle district to Canton and Massillon. Exhibit 187, consisting of six sheets, is based on the mining point formula.

(Exhibit 187, Witness Adell, received in evidence.)

Exhibit 188, consisting of nine sheets, is based upon the mines and shipping points formula.

(Exhibit 188, Witness Adell, received in evidence.)

Exhibit 189, consisting of five sheets, is based upon the active mines formula.

(Exhibit 189, Witness Adell, received in evidence.)

(1350) The next group of three exhibits relate to the average distances via shortest existing tariff routes from the Massillon district to Canton and Massillon.

Exhibit 190, consisting of three sheets, is based on the mining point formula.

(Exhibit 190, Witness Adell, received in evidence.)

Exhibit 191, consisting of four sheets, is based upon the mines and shipping points formula.

(Exhibit 191, Witness Adell, received in evidence.)

Exhibit 192, consisting of one sheet, is based upon the active mines formula.

(Exhibit 192, Witness Adell, received in evidence.)

[fol. 1679] I have summarized and compared the average distances via the shortest existing tariff routes from the Ohio No. 8, Middle and Massillon districts to Canton and

Massillon, based on the three formulas I have described. This is shown in my Exhibit 193. As in the case of Exhibit 183, this exhibit shows that the average short tariff distances from the active mines in these three districts to Canton and Massillon are considerably under the average short tariff route mileages from the mining points, or the tariff origins.

(Exhibit 193, Witness Adell, received in evidence.)

[fol. 1680] (1351) I have completed my mileage exhibits.

My next exhibit, which will be 194, consisting of two sheets, is a statement showing rates on bituminous coal, carloads, from (a) mining points and (b) mines and shipping points in the No. 8 District of Ohio on the Wheeling & Lake Erie Railway to destinations on the Wheeling & Lake Erie Railway and Akron, Canton & Youngstown Railway, based upon application of I. C. C. Docket 23922 scale to each individual destination; also rate produced by applying average distance to each destination group. It is introduced to show that the 23922 scale was applied in a very conservative manner in the publication of the Wheeling's voluntary reductions.

In our application to the Public Utilities Commission of Ohio for authority to publish these reduced rates on short notice, which has been introduced in this proceeding as Exhibit 2, we asked for authority to publish specific rates, not only to Cleveland, Lorain, Akron and Huron, but to all of the points on our Cleveland Division between Canton and Cleveland, and all of the points on our Toledo Division between Brewster and Massillon, on the one hand, and Lorain, (1352) and Huron, on the other hand.

While we asked for authority to publish specific rates to each of these intermediate points, we did not give them the benefit of their shorter mileage in the application of the scale.

For example, we applied the Cleveland rate of $1.45 to [fol. 1681] all stations as far south on the Cleveland Division as Moran. This was done for the reason that all points from Cleveland to Moran, inclusive, formerly took the rate of $1.74 from the Ohio No. 8 District. The mileages from the Ohio No. 8 District to these points are shown in the first two columns of the first block of this exhibit. The first column shows the mileages computed on the mining

point formula, which is referred to as Formula A; the second column shows the mileages computed on the tariff origin formula, which is referred to as Formula B. In both instances, only the Wheeling & Lake Erie Railway mines or origins are used.

The last column of the first block of the exhibit shows that the rate was fixed for Cleveland at $1.45 for the reason that Cleveland falls within the 130-140 mile block on the 23922 scale. However, had we given each of these points, Cleveland to Moran, inclusive, the benefit of its mileage the rates to Bedford, Falls Junction, Solon, and Chagrin Falls would have been reduced to at least $1.40 per ton, and the rates to Twinsburg and Moran would have been reduced to (1353) $1.34 per ton, or an average of $1.40 for all points in the Cleveland group on the Cleveland Division. All this is shown in detail in the first block of the exhibit.

Applying the same principle to the points which were given the Lorain rate of $1.45 per ton, we find from the first block on page 2 of the exhibit that some of these [fol. 1682] points would have taken rates of $1.40, $1.34, $1.28, and $1.22 per ton, and that the average for the group would have been $1.34 per ton instead of $1.45 per ton. In the same way, the average for the Huron group would have been $1.45 per ton instead of $1.55 per ton.

This situation should be borne in bind in connection with the rate exhibits which are to follow where we have shown only the mileages to Cleveland proper, Lorain proper, and Huron proper. These are the most distant points in the Cleveland group, the Lorain group, and the Huron group on the Wheeling & Lake Erie Railway.

The application of the average distance to the groups instead of the maximum distance to the group in these rate exhibits would produce higher earnings in mills per ton mile from the existing rates. We have not prepared similar exhibits as to the Middle and Massillon districts, but, in general, the same principle would apply as to the rate from those districts to the destination groups shown on Exhibit 194.

(Exhibit 194, Witness Adell, received in evidence.)

(1354) My next exhibit, which will be 195, consists of three sheets and contains a comparison between the rates

from mining points on the Wheeling & Lake Erie Railway in the Ohio No. 8 District to Cleveland, Lorain, Huron, Akron, Canton and Massillon, Ohio, and the Ex-River Rate from Ohio River ports to Cleveland, Lorain, Canton, Massillon, Youngstown, and Warren, Ohio.

[fol. 1683] Of course, these Ex-River rates are in the nature of proportional rates, but they also appear to be maximum reasonable rates. The rate of 77 cents per ton from Conway and Colona, Penn., to Youngstown and Warren, Ohio, shown at the foot of sheet 3 of the Exhibit was published pursuant to the finding of the Commission in I. & S. Docket No. 3282, Coal, Bituminous, Ex-River from Colona and Conway, Penna., to Youngstown, Ohio, 163 I. C. C. 13, that a reasonable maximum rate on this Ex-River coal would be 77 cents to Youngstown and points grouped therewith, including Warren, Ohio.

In its report in I. & S. Docket No. 3619, Ex-Ohio River Coal to Cleveland, Lorain, and other Ohio points, 185 I. C. C. 211, the Commission found that the Wheeling's Ex-River rates from points on its river division should be constructed by adding to the 77-cent rates to Youngstown the existing all-rail differentials of Cleveland and Lorain and Canton and Massillon over Youngstown. This resulted in an Ex-River Rate (1355) of $1.27 from the Wheeling's ports to Cleveland and Lorain, made up of the maximum ex-river rate of 77 cents to Youngstown, plus the 50-cent differential, Cleveland over Youngstown, in the all-rail rate from the Pittsburgh District. It likewise resulted in a rate of $1.02 to Canton and Massillon, made up of the maximum rate of 77 cents to Youngstown, plus the differential of 25 cents, Canton and Massillon over Youngstown, in the all-rail rate from the Pittsburgh district.

[fol. 1684] At page 221 of its report in I. & S. Docket No. 3619, the Commission says that these rates of $1.27 to Cleveland and Lorain, and $1.02 to Canton and Massillon, would be properly related to the 77-cent rate approved in the Youngstown case, considering the differences in distances. It is, therefore, apparent that the Ex-river rates of $1.02 to Canton and Massillon and $1.27 to Cleveland and Lorain are also maximum reasonable rates.

This exhibit shows that the reduced rates from the Ohio No. 8 District to Cleveland, Lorain, Huron, Akron, Canton and Massillon are maximum reasonable rates, when com-

pared with the maximum reasonable ex-river rates, after due allowance is made for the fact that the Ex-river rates are in the nature of proportional rates.

Thus, to Cleveland the Ex-river rate of $1.27 applies for distances ranging from 108 miles to 159.3 miles yielding earnings ranging from 11.75 mills per ton mile down to 7.97 (1356) mills per ton mile.

To Lorain the same rate applies for distances ranging from 141.4 miles to 162.2 miles, producing earnings ranging from 8.98 mills per ton-mile to 7.82 mills per ton-mile.

The all-rail rate of $1.45 from the Ohio No. 8 District to Cleveland and Lorain is on a substantially higher level.

As a ready means of comparison we have also shown the relation which the all-rail rates from the Ohio No. 8 District [fol. 1685] to the six destinations bear to rates under the Holmes and Hallowell scale for the same distances and have made a similar comparison for the ex-river rates. Again this shows that the all-rail rates bear a much higher relation to the Holmes and Hallowell scale rates for the same distance than do these maximum ex-river rates.

In this exhibit 195 the only Wheeling & Lake Erie ports shown are Martins Ferry and Mingo Junction, Ohio, as up to this time no ex-river coal has moved from any other Wheeling and Lake Erie port. That is shown on page 2, in the first column.

If we had shown all of the river ports from which our rates apply, the average mileages would have been slightly less, namely, to Cleveland, 147 miles; to Lorain, 149 miles; to Canton, 87 miles; and to Massillon, 80 miles. (1358) It is worthy of note that all of the river ports shown on this exhibit are located within the limits of the Ohio No. 8 District, excepting Colona and Conway, Penna.

(Exhibit 195, Witness Adell, received in evidence.)

The mileages shown under the heading "Distances" on the first page of Exhibit 195 are the average distances from mining points on the Wheeling & Lake Erie Railway in the No. 8 District of Ohio to the various destinations shown via the Wheeling & Lake Erie Railway direct.

Exhibit numbers 164 and 169 should be inserted in the blank about the middle of the exhibit in Note 1. As a matter of clarification, I might state that in Exhibits 164 and [fol. 1686] 169 some of the distances are in decimals, and in

Exhibit 195 we have reflected those distances (1359) by using the next whole mile. For example, on Exhibit 164, the distance from the No. 8 District to Cleveland, Ohio, is 135.8 miles, while on Exhibit 195 we have shown the distance to Cleveland, Ohio, as 136 miles. In this exhibit and in the rate comparison exhibits which are to follow I have always used Wheeling & Lake Erie direct mileages for the purpose of comparison with other routes. I think I have already shown in my mileage exhibit what the short tariff route mileages are from the No. 8, Middle and Massillon Districts, to these destinations for all mines in those districts. If anyone wishes to use those mileages for comparative purposes instead of the mileages of the Wheeling & Lake Erie Railway direct it is merely a matter of comparing two sets of exhibits.

My next series of exhibits consists of six single-sheet statements, the first of which will be Exhibit 196. It contains a comparison between the rates from No. 8, Middle and Massillon Districts via the Wheeling & Lake Erie Railway to Cleveland, Ohio, with rates from various origins and origin (1360) groups in southwestern Indiana to destinations in eastern central Illinois, and to one destination in Indiana, and from various Illinois groups to East St. Louis, Ill., and Davenport, Iowa.

Most of the destinations in eastern central Illinois are in the so-called destination territory embraced in Docket 23922, [fol. 1687] and the rates thereto were prescribed by the Interstate Commerce Commission. The rates to East St. Louis were prescribed by the Interstate Commerce Commission in Intrastate Rates on Coal to East St. Louis, Ill., 142 I. C. C. 95, and 161 I. C. C. 371. The rates to Davenport were prescribed by the Interstate Commerce Commission in Intrastate Rates on Bituminous Coal, between points in Illinois, 182 I. C. C. 537.

The compared rates have been separated into three blocks. The first block, containing the longer mileages, is for comparison with the Wheeling & Lake Erie rate from the No. 8 District to Cleveland. The second block is for comparison with the Wheeling & Lake Erie rate from the Middle District to Cleveland, and the last block is for comparison with the Wheeling and Lake Erie rate from the Massillon District to Cleveland. The references to the Interstate Commerce Commission's reports in which these rates were

prescribed are shown in the right-hand column of the exhibit.

Most, if not all, of the rates shown for comparative purposes were prescribed by the Interstate Commerce Commission as maximum (1361) reasonable rates. While some of these rates are slightly higher for comparable distances than the Wheeling & Lake Erie rates from the No. 8, Middle and Massillon Districts to Cleveland, it will be noted that on the whole they are on a somewhat lower level than the Wheeling's rates.

[fol. 1688] Mr. Orcutt: Mr. Examiner, at the Columbus hearing we objected to any evidence directed toward the reasonableness of the Ohio rates, and my understanding was that that objection was a blanket objection to all such testimony offered by the Wheeling & Lake Erie. Under that assumption I have not been objecting to these exhibits and testimony of Mr. Adell. They will go, naturally, to the reasonableness of the intrastate rates. Is my understanding correct that that objection made at Columbus still obtains and goes to all these exhibits?

Examiner Trezise: The objection went to evidence concerning the reasonableness of the intrastate rates in Ohio, if that is what you mean.

The Witness: That is right.

Mr. Orcutt: Should I re-make the objection now in connection with these exhibits?

Examiner Trezise: It will stand all the way through. It is well understood that you object to that type of evidence.

Mr. Orcutt: I just wanted to understand it clearly.

Mr. Martin: And may it be understood, Mr. Examiner, that these exhibits, as well as those objected to at Columbus, are (1362) offered for the purpose of showing that the Wheeling & Lake Erie's rates here in issue are maximum reasonable rates? That is the purpose of these ex-[fol. 1689] hibits.

Mr. Orcutt: And that, we contend is not an issue in this case and it is why we objected to the testimony.

Examiner Trezise: That is understood.

(Narrative continued:) For example, the first five rates shown for comparative purposes are all less than the rate of 145 cents from the Ohio No. 8 District to Cleveland, but in each instance the distance is greater than the 136 miles

from the Ohio No. 8 District to Cleveland, and consequently the earnings per ton-mile developed by these comparative rates are substantially less. In the next block of rates, which may be compared with the rate of $1.22 from the Middle District to Cleveland, Ohio, for a haul of 98 miles, we find three rates less than $1.22 applying for hauls of 106 to 118 miles, while the rate of $1.27 applies for hauls of 123 miles to 146 miles.

In a recent decision, Docket 23130 and related cases, Intrastate rates on Bituminous Coal Between Points in Illinois, 182 I. C. C. 537, the Interstate Commerce Commission prescribed a maximum reasonable rate of $1.23 from the Fulton-Peoria group, Illinois, to Davenport, Iowa, for a distance of 98 miles, which may be compared with the Wheeling's rate of $1.22 from the Middle District for the same distance.

(1363) The last block of rates on the exhibit is for comparison with the Wheeling's rate of $1.08 from the Masil-
[fol. 1690] lon District to Cleveland for a distance of 78 miles. These compared rates range from 87 cents for a distance of 71 to 86 miles, to $1.15 for a distance of 78 miles to 84 miles, and include one rate of $1.05 for a distance of 106 miles.

As I have stated, in my opinion, these compared rates, generally speaking, are on a somewhat lower level than the rates applicable from the No. 8, Middle and Massillon Districts, on the Wheeling & Lake Erie to Cleveland, and indicate that the Cleveland rates are maximum reasonable rates.

The mileages shown from the No. 8, Middle and Massillon Districts to Cleveland are Wheeling & Lake Erie mileages. If short tariff route mileages from all of the mining points in the groups were used instead of Wheeling & Lake Erie mileages, the distance from the No. 8 District to Cleveland would be 137 miles, producing earnings of 10.58 mills. The distance from the Middle District to Cleveland would be 103 miles, producing earnings of 11.84 mills. The distance from the Massillon District to Cleveland would be 77 miles, producing earnings of 14.02 mills.

(Exhibit 196, Witness Adell, received in evidence).

My Exhibit 197 is similar to Exhibit 196, and is (1364) prepared in the same manner as Exhibit 196.

(In response to questions by Mr. Orcutt:) That is the exhibit bearing the notation XT-114 in the left-hand mar-
[fol. 1691] gin, and contains a comparison between the Wheeling & Lake Erie rates from the No. 8, Middle and Massillon Districts to Lorain and South Lorain, Ohio, with the rates in the Indiana-Illinois territory. As in the case of the previous exhibit, it will appear that our rates to Lorain from these three districts are on substantially the same level as the rates herein shown, as prescribed by the Interstate Commerce Commission for application in the Indiana-Illinois territory, for the most part, as maximum reasonable rates.

The mileages shown from the No. 8, Middle and Massillon districts to Lorain are Wheeling & Lake Erie mileages. If short tariff route mileages from all of the mining points in the groups were used instead of Wheeling & Lake Erie mileages, the distance from the No. 8 District to Lorain would be 146 miles, producing earnings of 9.93 mills. The distance from the Middle District to Lorain would be 115 miles, producing earnings of 11.13 mills. The distance from the Massillon District to Lorain would be 75 miles, producing earnings of 14.40 mills.

(Exhibit 197, Witness Adell, received in evidence).

(1365) My Exhibit 198, which bears the symbol XT 115 in the upper left-hand corner, is similar to the two previous exhibits and is prepared in the same manner, except that the destination is Huron, Ohio. This exhibit shows that our rate of $1.55 from the No. 8 District to Huron, for a distance of 149 miles, develops earnings of 10.40 mills per ton-
[fol. 1692] mile, which are substantially higher than the earnings developed by most of the compared rates shown in the first block. For example, note the rate of $1.56 from the Evansville group to Hoopeston, Ill., for a haul of 187 miles, and two rates of $1.55, which apply for hauls of 177 and 185 miles. The same may be said of the compared rates shown in the second block of the exhibit which are clearly on a lower level than the Wheeling's rates from the Middle District to Huron.

From the Massillon District to Huron the Wheeling's rate compares favorably with the rates shown in the third block of the exhibit.

The mileages shown from the No. 8, Middle and Massil-

lon Districts to Huron are Wheeling & Lake Erie mileages. If short tariff route mileages from all of the mining points in the groups were used instead of Wheeling & Lake Erie mileages, the distance from the No. 8 District to Huron would be 175 miles, producing earnings of 8.85 mills. The distance from the Middle District to Huron would be 152 miles, producing earnings of 8.81 (1366) mills. The distance from the Massillon District to Huron would be 122 miles, producing earnings of 9.42 mills.

I have already referred to the circuitous routes on the Pennsylvania Railroad and the Baltimore & Ohio Railroad from the No. 8 and Middle Districts to Huron and Loram, Ohio. These circuitous routes are reflected in those mileages of 175 miles and 152 miles to which I have just [fol. 1693] referred.

(Exhibit 198, Witness Adell, received in evidence.)

My Exhibit 199, which is marked with the Symbol XT 116, is similar to the previous exhibits, with the exception that the destination is Akron, Ohio. This exhibit shows that the rates applicable via the Wheeling & Lake Erie and the Akron, Canton & Youngstown Railways to Akron, Ohio, from the No. 8 and Middle Districts, are clearly on a higher level than the compared rates in the Indiana-Illinois territory, which also compare favorably with the rate from the Massillon District. The mileages shown from the No. 8, Middle and Massillon Districts to Akron, Ohio, are Wheeling & Lake Erie mileages. If short tariff route mileages from all of the mining points in the groups were used instead of Wheeling & Lake Erie mileages the distance from the No. 8 District to Akron would be 104 miles, producing earnings of 12.30 mills.

(1367) The distance from the Middle District to Akron would be 73 miles, producing earnings of 13.83 mills. The distance from the Massillon District to Akron would be 41 miles, producing earnings of 21.21 mills.

(Exhibit 199, Witness Adell, received in evidence.)

The next exhibit, 200, which is marked with the symbol XT 117, is similar to the previous exhibits, and relates to Canton, Ohio, as a destination. It likewise shows that the Wheeling's rates from the No. 8, Middle and Massillon

Districts to this destination are on a higher level than rates [fol. 1694] selected for comparative purposes.

The mileages shown from No. 8, Middle and Massillon Districts to Canton are Wheeling & Lake Erie mileages. If short tariff route mileages from all of the mining points in the groups were used instead of Wheeling & Lake Erie mileages the distance from the No. 8 District to Canton would be 79 miles, producing earnings of 13.67 mills. The distance from the Middle District to Canton would be 49 miles, producing earnings of 16.32 mills. The distance from the Massillon District to Canton would be 32 miles, producing earnings of 22.50 mills.

(Exhibit 200, Witness Adell, received in evidence).

(1368) The last exhibit of this series, 201, which is marked with the symbol XT 118, is based on Massillon, Ohio, as a destination, and is prepared in the same manner as the five preceding exhibits, except that no attempt has been made to show rates for comparison with the Wheeling's rate of 60 cents for the movement of 11 miles from the Massillon District to Massillon, Ohio.

The exhibit shows that the rates from the No. 8 and Middle Districts to Massillon are on a higher level than the compared rates.

The mileages shown from the No. 8, Middle and Massillon Districts to Massillon are Wheeling & Lake Erie Railway mileages. If short tariff route mileages from all of the mining points in the groups were used instead of Wheeling & Lake Erie mileages, the distance from the No. 8 [fol. 1695] District to Massillon would be 83 miles, producing earnings of 13.01 mills. The distance from the Middle District to Massillon would be 53 miles, producing earnings of 15.09 mills. The distance from the Massillon District to Massillon would be 29 miles, producing earnings of 20.68 mills.

This exhibit, together with the five preceding exhibits, shows that the rates established by the Wheeling & Lake Erie Railway Company from the Ohio No. 8, Middle and Massillon Districts to Cleveland, Lorain, Huron, Akron, Canton and Massillon (1369) are on at least as high a level as the rates prescribed by the Interstate Commerce Commission for application in the Indiana-Illinois territory,

most, if not all, of which were prescribed as maximum reasonable rates.

(Exhibit 201, Witness Adell, received in evidence.)

While I have not shown any figures as to the volume of movement, I am of the opinion that since the Interstate Commerce Commission prescribed rates for application between the various origin groups and the destinations shown on the exhibit, it is proper to assume that there was a sufficient movement to justify the establishment of these rates.

I have prepared an exhibit and desire to file it as Exhibit 202, showing a proposed progression of the I. C. C. Docket No. 23922 scale up to 600 miles. In this statement I have shown the progression of the 23922 scale from 300 [fol. 1696] miles up to 600 miles by using the so-called square root formula, based on the 100-mile block. A study of the scales prescribed in Dockets 23130 and 23922 seemed to indicate that this formula had been used for the progression of the 23130 scale from 100 miles to 130 miles, and for the progression of the 23922 scale from 100 miles to 300 miles. Briefly, this formula means that the rate for any block above 100 miles would bear the same relation to the rate for the 100-mile block as the square (1370) root of the maximum distance of such higher block would bear to the square root of 100 miles.

The use of this method of progression is very favorable to the longer distances as the rates for the higher blocks taper very rapidly. This fact was recognized by the Commission in its report in Western Cement Rates, 48 I. C. C. 201, where it stated, at page 211:

"Under our present rate systems rates seem more nearly proportional to the square root of the distance than to the distance itself, thus showing a tendency in the present rates to promote long-distance competition. It was found that if the progression on the basis of making rates proportional to the square root of the distance was extended for very long distances, the ton-mile earnings became clearly too low. Whether it is economically wise to encourage long-distance competition is one of the questions which is prominent in this case."

[fol. 1697] The second column of the exhibit shows the 23922 scale as described for distance up to 300 miles and the proposed rates from 300 miles to 600 miles. The third column shows the actual rates of progression of the scale up to 300 miles, and the proposed rate of progression beyond.

The last column shows the rates which would be produced by the exact application of the square root formula, based on the 100-mile block. To avoid the use of fractions and to provide (1371) for a consistent properly graded progression, it is necessary to modify the rates produced by the exact application of the square root formula to the extent shown in the second column of the exhibit. This is consistent with the method followed by the Commission in progressing these scales above 100 miles.

(Exhibit 202, Witness Adell, received in evidence.)

[fol. 1698] Testimony Taken at Washington, D. C., January 6, 1933

Direct Examination of Mr. Adell, continued.

By Mr. Martin:

(1373) My next series of exhibits consist of six statements, each of one sheet. The first exhibit of the series, which will be No. 203, applies to Cleveland, Ohio. It shows the rates to Cleveland from the No. 8, Middle and Massillon Districts of (1374) Ohio, from the Pittsburgh, Connellsville and Fairmont Districts, and from the $2.39 Inner Crescent, and the $2.64 Outer Crescent rate groups. The mileages shown from the three Ohio districts are via the Wheeling & Lake Erie direct. Those from the other districts are average mileages over short tariff routes, as determined by Mr. C. B. Ackerman and furnished to us. They will be supported by the testimony of Mr. Ackerman in this proceeding.

The exhibit also shows what the rate would be from each of the districts or groups if based on the 23922 scale progressed, using the mileages shown on the exhibit.

This exhibit shows that on the basis of Wheeling & Lake Erie Railway mileages, the rates from these three Ohio dis- [fol. 1699] tricts to Cleveland are exactly on the scale; that

on the basis of short tariff route mileages the rate from the Pittsburgh district is somewhat above the scale; that the rates from the Connellsville district and the Outer Crescent group are slightly above the scale; and that the rates from the Fairmont District and the Inner Crescent are slightly below the scale.

(1375) For the mileages above 300 I have used the rates shown in my Exhibit 202, wherein I progressed the 23922 scale on the square root formula from 300 to 600 miles as previously explained.

The exhibit shows that if all of the rates from the districts outside of Ohio were placed on the 23922 scale as so progressed the rate from the Pittsburgh District would be reduced from $1.84 to $1.65. The rate from the Connellsville District would be reduced from $1.90 to $1.85. The rate from the Outer Crescent group would be reduced from $2.64 to $2.58, while the rate from the Fairmont District would be increased from $1.99 to $2.02, and the rate from the Inner Crescent group would be increased from $2.39 to $2.50.

We have also shown what the rate would be in each instance if based on the Holmes and Hallowell scale and the percentage of the present rates to the Holmes and Hallowell scale.

If the Commission is of the opinion that the maintenance of the existing rates from the No. 8, Middle and Massillon [fol. 1700] Districts to Cleveland, Lorain, Huron, Akron, Canton and Massillon requires any adjustment of the interstate rates, it is our position that such adjustment should be made by the application of the rates developed by the 23922 scale as progressed, except that we do not advocate the increase of any of the interstate rates.

As I have stated, the mileages shown in Exhibit 203 are (1376) mileages via the Wheeling & Lake Erie direct. If short tariff route distances were used instead, the mileages from the No. 8 District to Cleveland and Akron and Canton, Ohio, would be substantially the same, but on account of the presence of circuitous routes, mileages would be higher to Lorain and Huron and Massillon.

(Exhibit 203, Witness Adell, received in evidence.)

Note 1 refers to Exhibits 164 and 169; the first block is two exhibits, 164 and 169. The second block has not been put in

yet as an exhibit; that will follow later. Cleveland, Lorain, Akron and Huron are Exhibit 164, and Canton and Massillon are Exhibit 169. It is a fact that I only need Exhibit 164, as far as Cleveland is concerned, I would not need to refer to Exhibit 169 here.

(1377) The next exhibit, 204, is similar in all respects to the preceding exhibit, except that the destination shown is Lorain, Ohio.

This exhibit shows that the rates to Lorain from the Connellsville and Fairmont Districts and from the Inner Crescent group are all lower than the rates which would apply [fol. 1701] under the scale, although the rates from the Pittsburgh District and from the Outer Crescent groups are slightly higher.

Exhibit 164 is the exhibit number that is to go in the Note 1 blank.

(Exhibit 204, Witness Adell, received in evidence.)

(1378) South Lorain is in the Lorain switching limits, and the distance would be the same to South Lorain or to Lorain.

The next exhibit, which will be 205, treats Huron, Ohio, as the destination. The present rates from the Pittsburgh, Connellsville and Fairmont Districts to this destination are much higher than the rates to Cleveland and Lorain, and, therefore, represent higher percentages of (1379) the 23922 scale. This exhibit shows that the rates to Huron from the Fairmont district and the Inner Crescent group are lower than the rates which would apply under the 23922 scale, although the rates from the Pittsburgh and Connellsville Districts and from the Outer Crescent group are slightly higher. The figure 164 should be inserted in the first blank at the bottom of the exhibit.

(Exhibit 205, Witness Adell, received in evidence.)

Akron is the destination shown in the next exhibit, which will be No. 206. This exhibit shows that the present rates from the Fairmont District and from the Inner Crescent group are already below the scale; that the rates from the Pittsburgh and Connellsville Districts and from the Outer [fol. 1702] Crescent group are somewhat above the scale. The figure 164 should be inserted in the first blank of that exhibit.

(Exhibit 206, Witness Adell, received in evidence.)

Similar information as to Canton is shown on my next exhibit, which will be No. 207. This exhibit shows that all of the rates from the outside districts are already below the scale, except from the Pittsburgh District and from the Outer (1380) Crescent group. The number at the bottom of Exhibit 207 should be 169.

(Exhibit 207, Witness Adell, received in evidence.)

When I say "scale" I mean the 23922 scale.

The last exhibit of this series, which will be No. 208, relates to Massillon, Ohio. Canton and Massillon were grouped as destination points in the report of the Public Utilities Commission of Ohio in the Republic Case.

This exhibit shows that when taken separately the rate of $1.08 from the Ohio No. 8 District to Massillon is above the 23922 scale; that the rate of 80 cents from the Middle District is on the scale, while the rate of 60 cents from the single mine in the Massillon District is below the scale. The rates from the Connellsville District and the Inner Crescent group are already below the scale while those from the Pittsburgh and Fairmont districts and the Outer Crescent groups are somewhat above the scale. The figure 169 should be inserted in the first blank at the foot of the exhibit.

[fol. 1703] (Exhibit 208, Witness Adell, received in evidence.)

The next series of exhibits consists of six statements (1381), each on a single sheet. These exhibits are similar to the last six exhibits, except that here instead of showing percentages which the present rates bear to the 23922 scale and to the Holmes and Hallowell scale, we have shown the earnings produced by the present rates and by rates based on the 23922 scale progressed.

(In response to questions by Mr. Bull): Referring to the heading on this statement, "Statement showing Average distances", and the heading on the other, "Average Distance via Short Tariff Routes," the latter heading should not be changed, in Exhibit 209, to short tariff route distances, for the reason that the Wheeling & Lake Erie distances are the distances via the Wheeling direct, to Cleveland. The other distances on Exhibit 209 from Pittsburgh,

Connellsville and Fairmont are the short tariff route distances. (1382) That will be explained when the other exhibit is filed. It will show that the average distances used in this other exhibit are the short tariff route distances. I do not mean the average distances from Pittsburgh are the same as the short line tariff distances from Pittsburgh. I mean that the distances shown on Exhibit 209 from Pittsburgh, Connellsville, Fairmont, Inner Crescent and Outer Crescent groups to Cleveland, Ohio, are the average short tariff route distances from the group.

Mr. Martin: If it will aid in clearing the thing, the words [fol. 1704] "via short tariff routes" may be inserted after the word "distances" in the first line of this exhibit and in the following five exhibits.

That, Mr. Bull, applies, as I understand it, to all of the distances other than those from the three Ohio Districts, which, as shown by the note are Wheeling & Lake Erie direct mileages.

(Narrative continued in response to questions by Mr. Martin.) (1383) It is correct that the mileages shown in Exhibit 209 and the next five exhibits following it are the same as the mileages shown in my previous six exhibits, and calculated in just the same way as I explained there.

The first of these exhibits, which will be 209, deals with Cleveland, Ohio. It shows that earnings produced by rates based on this scale applied throughout the origin districts here shown would taper downward sharply from 13.84 mills per ton-mile for the rate from the Massillon District to 6.04 mills per ton-mile for the rate from the Outer Crescent group. (1384) Exhibit 164 is the number to go in the first blank on that Exhibit 209.

(Exhibit 209, Witness Adell, received in evidence.)

The next exhibit, which is similar in form and which will be 210, relates to Lorain, Ohio. The figure 164 should be inserted in the first blank.

(Exhibit 210, Witness Adell, received in evidence.)

The next exhibit, 211, applies to Huron, Ohio, and the [fol. 1705] number 164 should be inserted in the first blank at the bottom of the exhibit.

(Exhibit 211, Witness Adell, received in evidence.)

The fourth exhibit in this series, which deals with Akron, will be No. 212, and the No. 164 should be inserted in the first blank at the bottom of the exhibit.

(Exhibit 212, Witness Adell, received in evidence.)

The fifth exhibit, dealing with Canton, will be Exhibit 213, and the number 169 should be inserted in the first blank at the bottom of the exhibit.

(Exhibit 213, Witness Adell, received in evidence.)

The last exhibit of this series, which will be No. 214, deals with Massillon, Ohio, and the No. 169 should be inserted in the first blank at the bottom of the exhibit.

(1385) (Exhibit 214, Witness Adell, received in evidence.)

Throughout this series of exhibits, all of the mileages shown from the Ohio Districts are Wheeling & Lake Erie mileages taken from Exhibits Nos 164 and 169. All of the mileages from the districts and groups outside of Ohio were supplied us by Mr. Ackerman and will be supported by his testimony.

I have examined the mileage exhibits which were filed in this proceeding by Mr. Kern. I have made a random check of Mr. Kern's Exhibit 35, which covers a list of active mines on all railroads serving the Ohio No. 8 and other districts to Cleveland, Lorain, Huron, Canton, Massillon, [fol. 1706] Akron and Mansfield, Ohio, and have developed numerous discrepancies and errors of different nature.

In preparing some of our exhibits it was, of course, necessary to use Mr. Kern's Exhibit 35, and on page 2, Authorities for Distances, I believe Mr. Kern testified that he used the mileages from the billing stations in all instances. For account of the Wheeling & Lake Erie Railway the mileages used and furnished, I might say, by the Wheeling to Mr. Kern (1386), were the Engineering Department Mileages from the Tipple to the first Station En Route to Destination, plus the Wheeling & Lake Erie Railway mileages on file with the Interstate Commerce Commission.

I have also noted that in some instances for account of

the Pennsylvania Railroad the tipple mileage has been used instead of the billing station mileage.

Page 3, headed "Baltimore & Ohio Railroad from St. Clairsville No. 8 (Ohio) District", the first route shown on this page reads as follows: "Coluumn 1—Baltimore & Ohio Railroad, 2.2 miles to Bellaire, Ohio—Baltimore & Ohio Railroad 159.3 miles to Cleveland, Ohio (through Warwick, Ohio), total through miles 322.9, average 161.5."

Apparently the tariff route of the Baltimore & Ohio Railroad through Warwick and Lester was not used, and if the Warwick and Lester route had been used the distance of 159.3 miles from Bellaire, Ohio, to Cleveland, would have been 163.8 miles, and, of course, that would have the effect of changing the through mile figure of 322.9 miles and the [fol. 1707] average figure of 161.5 miles. I might state that the average should be, or would be, if the Warwick-Lester route had been applied, 166 miles, instead of 161.5 miles.

On the same page, with Canton, Ohio, as the destination, the distance from these various mines to Canton, Ohio, is shown as 144.3 miles, made up of a distance of 2.2 miles to Bellaire (1387) from the mines, plus 144.3 miles to Canton, and the total through mileage is shown as 292.9 miles, the average distance being shown as 146.5.

If the correct tariff route of the Baltimore & Ohio Railroad through Dover and Valley Junction had been used the 144.3 miles distance from Bellaire to Canton would have read 98.3 miles, and this, of course, would also change the through mileage shown and the average mileage. The average distance of 146.5 miles, as shown, would be reduced to 100.5 miles.

There are various other slight discrepencies on this page.

Page 4, which covers the distances from active mines on the Baltimore & Ohio Railroad in the Wheeling Creek No. 8 (Ohio) District to Cleveland, Ohio, shows the same discrepancy; that is, if the route via Warwick and Lester had been used it would have changed the distance from Uhrichsville, Ohio, to Cleveland, Ohio, of 98.9 miles to 103.2 miles, and the total through mileage figure of 1645.3 miles would [fol. 1708] change to 1696.9 miles, and the average distance would change from 137.1 miles to 141.4 miles.

Canton, Ohio, has the same discrepancy as previously stated in connection with page 3. That is, from Uhrichsville, Ohio, a distance of 83.7 miles is used, while the route of the Baltimore (1388) & Ohio through Dover and Valley Junction would produce a distance of 37.7. The average would be reduced from 121.9 miles to 75.9 miles.

Page 5; under Ohio No. 8 District, New York Central Railroad in arriving at the average distance from the active mines on the New York Central to Minerva, Ohio, for six mines, a total of 260.3 miles is shown, and the average distance to Minerva is shown as 42.4. An accurate calculation of the average from these mines to Minerva by using the total as shown on the exhibit would produce 43.4 miles instead of 42.4. It changes the average to Minerva by one mile, and, of course, that has the effect of changing all of the average distances shown at the bottom of page 5 and at the top of page 6 where 42.4 miles has been used as the average distance from the mines to Minerva, Ohio, in computing the through mileage. This average distance has been used on page 5 four times and on page 6 once.

On page 5, still in connection with the New York Central Ohio No. 8 District, active mines, to Lorain, Ohio, the total mileage for the 6 mines is shown as 836.3 miles, and which apparently produces an average of 129.4 miles. The correct average in this particular instance should be 139.4 in- [fol. 1709] stead of 129.4. I might state that these averages are not arrived at by the use of different distances from the mines to the station, the corrected averages, but are all mathematical (1389) calculations from the exhibit where errors have been made in division or addition.

The 129.4-mile average to Lorain, Ohio, appears at the bottom of page 5, in connection with Lorain, Ohio, and this should be changed to 139.4 miles for the reasons previously stated.

It would also have the effect of changing the figure shown on the exhibit under total through miles and under the average. On page 6, which is headed Ohio No. 8 District, P. R. R., and which shows the active mines on the Pennsylvania Railroad in the No. 8 District, from Tabor No. 1 Mine, located at Cadiz, Ohio, to Massillon, Ohio, the distance is shown as 108 miles. I believe a proper distance in this particular case would be 103 miles instead of 108

miles, and it would change the average from the active mines to Massillon of 95.6, as now shown, to 95.2 miles.

I just wanted to say this in connection with my statement made as to the use of tipple and station mileages on page 6. It is apparent that from the Coxe Mine, at Fernwood, Ohio, on the Pennsylvania Railroad, the station mileage was used, while from the Tabor No. 1 Mine at Cadiz, Ohio, the tipple mileage was used. If the tipple mileage had been used from the Coxe Mine it would have reduced [fol. 1710] the figures shown to all destinations by two miles.

(1390) There may be more startling discrepancies in the other pages than I have indicated here. As I previously said, I did not attempt to make a thorough check, but in trying to apply this exhibit to my subsequent exhibits, that is, the exhibits I put in, I developed these mistakes.

Cross examination.

By Mr. Bronson:

Referring to my Exhibits 203, 204, 205, 209, 210 and 211, I have used for the Pittsburgh, Connellsville, Fairmont, Inner and Outer Crescents, the average distances via the short tariff routes. (1391) That will be explained in detail by future exhibits to be put in this case by Mr. Ackerman. That is from all mines in those districts. With respect to Ohio No. 8, we have not used the average distances of the short line routes; we have used the average distances over the Wheeling & Lake Erie direct. I say average distances via short tariff routes at the top of the exhibit, and I explained that in a note at the bottom, Note 1, "For average distance from mining points on the Wheeling & Lake Erie, see Exhibit No. 164", and by referring to Exhibit 164 it will develop that the distance over the Wheeling & Lake Erie direct was used.

The only difference between the mileages shown from the Ohio district on Exhibit 203 and the subsequent exhibits and those shown on 164 and 169 are that we have done away with the fractions. In other words, we have raised [fol. 1711] the fraction to the next whole mile. It is true that I have computed the distance in Exhibit 203 from the mines on the Wheeling & Lake Erie in the Ohio No. 8 District to Cleveland against the mines on all lines in the Pitts-

burgh, Connellsville, Fairmont, and Inner and Outer Crescents to Cleveland. (1392) Exhibit 174 shows the average distances via short tariff routes from all mines in the Ohio No. 8 District to Cleveland, Lorain and Huron. If you use those distances to Lorain in Exhibit 204, I believe your rate would be $1.55, based on the 23922 scale, using the distances shown for all mines in the No. 8 District in Exhibit 174. But, as previously explained, the routes of some of the carriers are unduly circuitous and if potential workable routes had been applied I believe we could get that distance down to 140 miles. The same may be true as to circuitous routes, from Pittsburgh and other districts; but I do not believe so.

(1393) Using the average distances from all mines in No. 8 District in Ohio as a whole, in my Exhibit 205, it is true I would get a rate of $1.65 to Huron, but, as previously explained, the rates to Huron are over very circuitous routes. In fact, I have a little example here if you want me to read it into the record.

The Wheeling & Lake Erie does not serve the Cambridge District and I have made no check to develop what the Cambridge District combined with Ohio No. 8 District would produce. We are only interested in the No. 8. We do [fol. 1712] not serve Cambridge, and therefore, I limited my time and effort to the No. 8 District.

(1394) Referring to Exhibit 205, the present rate to Huron from the Pittsburgh District is $2.16. I do not know what the rate is as published by the Pittsburgh & West Virginia from the Pittsburgh district. I took the group as a whole. The going rate is $2.16. I do not know whether it is a fact that the Pittsburgh & West Virginia published a rate of $1.81 or $1.84.

If it so happened that under the 23922 scale a lower rate than $1.45 would be obtained from No. 8 district, I would not advocate the use of the low rate from the Pittsburgh & West Virginia mines. I think it should carry the group rate. (1395) I think our mines should carry the group rate.

By Mr. Bull:

Referring to the fact that on my Exhibit 207 I show an average distance from Fairmont to Canton of 239 miles and a rate of $1.84, I know that there is also a rate of $1.82 applying via certain routes from Fairmont to Canton; the

Baltimore & Ohio, I believe, publishes a rate of $1.82. I believe we can get an answer from Mr. Ackerman when he puts in his supporting data on the question as to the rate which would apply on that average distance of 239 miles.

Mr. Orcutt:

In Docket 25566, the rates, as published by the Wheeling [fol. 1713] & Lake Erie Railway (1397) and other Ohio carriers to northeastern Ohio have been attacked as being in violation of Section 13 of the Interstate Commerce Act. As to the other allegations, I would have to read the docket to refresh my memory. (1398) The rates published by the Wheeling & Lake Erie from Ohio No. 8, Middle District and Massillon District mines to Northeastern Ohio, including Canton and Massillon, have been attacked as being in violation of Section 13, also as unreasonable. A summarization of my answer would be that I regard the chief issue as the reasonableness of the rates of the Wheeling & Lake Erie Railway from Ohio No. 8 and the other districts in Ohio to northeastern Ohio.

Referring to my statement, in connection with Exhibit 194 or 195, that the ex-river rates are in the nature of proportional rates, but appear to be maximum reasonable rates, and as to what there is about them that makes them so appear to be maximum reasonable rates (1399)—I believe in my direct testimony I stated that in prescribing the 77-cent rate from Colona and Conway to Youngstown and Warren and intermediate points, the Commission found that the 77-cent rate was a reasonable maximum rate. In the subsequent I. & S. proceeding, 3619, the Commission prescribed a plussing of the 77-cent rate from Colona and Conway, which was a reasonable maximum rate, by adding the all-rail differential, Cleveland and Canton and Massillon over Youngstown from the Pittsburgh District, which [fol. 1714] produced a rate of $1.27 to Cleveland and $1.02 to Canton and Massillon. It is my opinion that the $1.27 rate and the $1.02 rate, arrived at as just related, are in the nature of a reasonable maximum rate.

(1400) Our ex-river rate was based on the rate from Colona and Conway. That 77-cent rate was a maximum reasonable rate. The Commission added on a 50-cent differential, which is really the maximum differential. The

Pittsburgh differential of 50 cents in the all-rail structure, I believe, is more than the differential from any of the other origin groups in that territory.

Now, when you add a maximum differential to a maximum reasonable rate, in my opinion, that makes a maximum reasonable rate.

That would be true from Colona and Conway to Cleveland, if the Commission had prescribed a rate from Colona and Conway to Cleveland.

(1401) My previous answer was in reference to the rates involved in I. & S. 3619, which were the rates of the Wheeling & Lake Erie from the Wheeling & Lake Erie River Division stations to Cleveland, Lorain, Canton and Massillon. I said those were in the nature of proportional rates, but appeared to be maximum reasonable rates.

I would not say there was anything specific in the Commission's decision in that case indicating specifically in so many words that those rates were maximum reasonable rates from our River Division, but from the reading of [fol. 1715] the opinion in 3619 that is the conclusion I arrived at.

(1402) I referred to the rates shown in my Exhibit 195, and the substance of my statement would be that I mean the rates in cents per ton and not the other comparative rates I have shown to the right as having been compared by me with maximum reasonable ex-river rates, and that also after having made due allowance for the fact that the ex-river rates are proportional rates, I believed these rates to be maximum reasonable rates. In making that observation, what I had in mind when I say I have made due allowance for the fact the ex-river rates are in the nature of proportional rates, while these rates are all-rail rates, is that I have compared the earnings per ton-mile produced by the commercial rates with the earnings per ton-mile produced by the ex-river rates, and it is apparently easy to note that the earnings per ton-mile on the ex-river rates are considerably less than the earnings on the commercial rates.

I was a witness in I. & S. 3619. (1403) If I recall correctly, in that particular case I attempted to show through my testimony and exhibits that the proposed rates of the Wheeling & Lake Erie of $1.10 to Cleveland and Lorain were not less than reasonable minimum rates. Had we

prevailed in that case and had the Commission permitted the establishment of $1.10 from our River Division points [fol. 1716] to Cleveland, those rates would have been in the nature of proportional rates. Having that in mind, I could not say what I would recommend as to the proper rate from our Ohio No. 8 District to Cleveland instead of $1.45, without making a study. I advocate the 23922 mileage scale for application on coal in Ohio as well as from other bituminous coal districts. I do not know whether it is the position of my company, but that is what I am trying to show through my exhibits. (1404) If that scale were applied from the Pittsburgh District to Cleveland it would produce a rate of $1.65. The rate from the No. 8 District to Cleveland would be $1.45, a difference of 20 cents. As to what the differential of Ohio No. 8 under Connellsville to Cleveland would be, I have given no consideration to differentials. I have taken the 23922 scale and applied that scale for the various mileages from the various districts. The Cleveland rate from No. 8 District under the application of the 23922 scale would be $1.45. The Connellsville District rate to Cleveland would be $1.85, a difference of 40 cents. The difference now, at the present time, is 45 cents. (1405) The application of that scale and the resulting rate of Connellsville over Ohio No. 8 to Cleveland would make a difference of 20 cents between the Connellsville rate to Cleveland and the Pittsburgh District rate to Cleveland. The present differential is 6 cents, Pittsburgh under Connellsville to Cleveland. The widening of the normal dif- [fol. 1717] ference between Ohio No. 8 and Pittsburgh to Cleveland of 10 cents, and the widening of the difference between Pittsburgh and Connellsville, has not had anything to do with our advocacy of the application of such a mileage scale in Ohio. When we established the Ohio No. 8 rate of $1.45 to Cleveland it was based on Wheeling & Lake Erie direct mileage, and at that time we had no figures before us to show what the application of the 23922 scale would produce from any other origin districts.

By Mr. Bull:

(1406) I am familiar with the Commission's decision in which they prescribed the mileage scale in 23922. We have shown what the mileages would be, and I have read into the testimony what the earnings per ton-mile would be. I

have not shown in any of my exhibits what that scale, applied as the Commission said it should be applied, would produce from the Ohio District to Cleveland or any other destination involved, for the reason that when these exhibits were prepared the rates of the Wheeling & Lake Erie were under attack and these were the rates we were trying to justify, and that is why we used Wheeling & Lake Erie mileages. Subsequent thereto these other ramifications came in and I think we have amended our mileage exhibits to reflect these average distances from the entire group. We did not think it necessary, or, rather, I should say I did not think it necessary, to amend (1407) our rate exhibits. All I was trying to prove in my rate exhibits was that our rate, that is, the rate established by the Wheeling [fol. 1718] & Lake Erie was a reasonable maximum rate.

By Mr. Carter Hall:

Sheet 2 of my Exhibit 166 purports to show all of the active mines in the No. 8 District of the Wheeling & Lake Erie as defined by me on Sheet 1 of the Exhibit; and it is all of the active mines as shown in Mr. Kern's Exhibit 35. As defined in the note on Sheet 1, it means the mines that shipped bituminous coal during the period July 1, 1931, to September 15, 1932. I am not familiar with the active mines on our railroad. This list of active mines was taken from Kern's Exhibit 35, which we furnished, I might say, to Mr. Kern. I have got some maps here that will show the location of the active mines (1408), that is, the mines on the Wheeling & Lake Erie. The active mines are, as stated before, taken from Mr. Kern's exhibit, and we furnished the information to him.

The Bainbridge mine shown on Sheet 2 of Exhibit 166 is the Bainbridge mine as shown on Sheet 8 of Kern's Exhibit 35. I might state that Bainbridge Mine No. 2, which is shown in our other exhibits, is not the same as this Bainbridge mine. Mr. Kern has apparently used the wrong Bainbridge mine. I had that noted on his exhibit and was going to read it into the record, but we felt, in view of the fact that we furnished him with a list of active mines, we could hardly tell him he had inserted the wrong mine in his exhibit. (1409) We have a Bainbridge Mine No. 2 located at Dillonvale. I did not know we had a Bainbridge

[fol. 1719] No. 4. Dillonvale is right close to Pine Valley. If there is a Bainbridge No. 4 located at Herrick on the Wheeling & Lake Erie, it is not shown in our mine list, and it would not have been an active mine within the term used by me and shown on my Sheet 2. (1410) The active mines are those shown on page 2 of Exhibit 166. If the Rose Mine shows in there they apparently shipped some coal; if it is not shown then it is not an active mine during this period. The same thing would be true of Cadiz Fairmont, near Kenwood; Kenova No. 2, near Kenwood; Cadiz Block in Kenwood, and Zitko, near Adena, if they are not shown on Sheet 2 of Exhibit 166 they are not active mines for this particular study. Referring to Sheet 2 of Exhibit 166, none of those mines are on the River Division between Steubenville and Martins Ferry.

There are no mines on the Wheeling & Lake Erie located at Martins Ferry or at Mingo Junction, shown in our mining list, No. 16. (1411) Whether there are mines there or not I do not know, but there are none in our mining list, and that is what we have used in the preparation of this mileage data. That covers the entire River Division, Steubenville to Wheeling.

On Sheet 2 of my Exhibit 166, Dorothy Mine, Nicholson No. 2, are located between Warrenton and Pine Valley. I believe those are the only two that show in our mining list and also on the active mine list. There are some mines shown on this active mine list that we do not show in our [fol. 1720] mining list, and I would not be able to give you the location off-hand. I could check it off and develop it. I mean there are active mines shown on our Sheet 2 of Exhibit 166 which are not on the mine list. That would be for this reason: The active mine list covers any shipper that may have shipped a car or more of coal during that particular period. Now, in a number of cases, not only on the Wheeling & Lake Erie, but apparently on other roads, some individual will ship a car through somebody else's tipple or from a team track, and the billing will show that individual as the shipper, although he may not have a mine on the Wheeling & Lake Erie. (1412) If I can refer to my Middle District Exhibits, I can point out three or four cases of that sort.

A number of the mines shown on Sheet 2 of Exhibit 166

are located between Neff and Adena. Bidwell No. 1. Mr. Kern shows Bidwell No. 2. Locust Point Mine, and Maller No. 9. Those mines I just mentioned are the only mines that appear in our mining list, also in the active mine list. Zitko appears in our mining list, but does not appear in our active mine list. Somers No. 6 does. I do not think Dale is located between Neff and Adena. I can give you all the active mines on the Toledo Division. The reason I cannot give you those between Adena and Jewett is because of the fact that my print does not carry all the stations located on the Wheeling & Lake Erie. We have only plotted the mines and their (1413) location at a certain station. [fol. 1721] The mines between Adena and Jewett are: Stellar Mine, Bellevue Mine, Theresa Mine, O. & P. No. 4, Cadiz Block, Wyekega, and Dale Mine. There is your Dale Mine. Also Rexford Mine, and there is a Wheeling Township No. 2 Mine on one of our branch lines from Adena, not on the Adena branch, but another branch line between Adena and Jewett, and also Somers No. 6. I believe that is all.

There are no mines on our River Division between Steubenville and Martins Ferry that are shown in our mining list. Whether there are mines there, I do not know. Our ex-river coal comes up the river, up or down or across. I do not know whether we have any river mines or not. As I stated before, this list is taken from the Wheeling & Lake Erie coal mines, tariff list No. 16 (1414), revised as of April 20, 1932.

By Mr. Webber:

In discussing Kern's Exhibit 35, I believe it is true I referred to certain discrepancies in respect to the distances to Canton, among other places. I believe that some of those discrepancies to Canton are the same that Mr. Eldridge had in mind in his testimony. Of course I was not here during his entire testimony. (1415) I do not know whether those discrepancies are material or not, but I will say I did not call attention to all the discrepancies I found in this exhibit. I have not attempted to compute the mileages or the averages or the results of these discrepancies for the reason that Mr. Kern in his exhibits has used the [fol. 1722] average of all tariff routes, while I have used the short tariff routes. As to the discrepancies to points other

than the mileages to Canton being minor, I do not know what you mean by the word "minor". They are a mile or two or three or four, or something like that.

By Mr. Gutheim:

(1416) The reference on several of my exhibits to Engineering Department distances, are the distances furnished to me by the Wheeling & Lake Erie Engineering Department and represent the distance from the mine tipple to the first station enroute to destination. In the ex-river case I also computed distances involving rates on bituminous coal. I have no other instances where I have computed distances utilizing these Engineering Department distances. That is the reason I have shown three or four formulas in computing these distances. In some instances, I have used the tipple mileage, and in other instances I have used the billing station mileages. When we computed the distances without the benefit of the Engineering Department figures, from the Ohio Region, we used the billing station as shown in Davis' tariff. (1417) The billing station for a mine shows right in the tariff, with the exception of the Pennsylvania Railroad, and there we have used the mine station. These billing stations are located on either side of the mine. For those mines where the billing stations are beyond the mines, it may or may not result that the use of the Engineering Department distances would mean a lesser distance than if we had used the billing sta-[fol. 1723] tion; I do not know. I have done this: I have checked out to develop whether there would be any difference between the mileages developed by using the Engineering Department distances and the billing station distances, and that is shown in my Exhibit 168 for the Wheeling. We also show it for the short tariff route distances computations from the Ohio No. 8 mines, from the entire group (1418), Exhibit 183. We have not shown similar figures with respect to the distances from the competitive districts. As I previously explained, the figures covering the distances from the other districts were furnished to me by Mr. Ackerman. I would rather that he would explain what he did in his particular computations. I have seen the figures and detailed work sheets. From the southern districts the distances were taken by Mr. Ackerman from

mine lists, from tipples where available, mine stations at other places, all mines in the mine list except for account of the Pennsylvania Railroad which furnished me a revised list of existing mines. I believe Mr. Ackerman used distances that are comparable with what I term Engineering Department distances. (1419) Insofar as the Baltimore & Ohio Railroad was concerned and the Pennsylvania Railroad was concerned, they show the actual distance from the tipples. Mr. Ackerman had no Engineering Department to handle his figures, and I would not have had to if we had shown the distance from the tipples. I do not show the distance in the tariff. I could get the figures from [fol. 1724] the Engineering Department but the outsider could not.

(1420) In an instance where the billing station lays beyond the tipple, and where I necessarily have the tipple between the billing station and the destination, I do not believe it would be possible for our engineering distance to be anything other than less than the distance from the billing point.

I believe the Wheeling & Lake Erie publishes rates to Canton and Massillon on bituminous coal in connection with other railroads, and in connection with the Erie Railroad to northeastern Ohio points, and in connection with the Nickel Plate to Rocky River, Ohio. Where we deliver to the Erie would depend upon the tariff route. Our interchanges with the Erie are at Kent, Creston and Cleveland. We deliver to the Nickel Plate at Cleveland, Bellevue, Fremont, Toledo, and other points. (1421) I do not know without checking whether the routes from Wheeling & Lake Erie mines to destinations east of Cleveland are short line routes.

(1422) The rate that we participate in, in connection with the Nickel Plate is to Rocky River, a station west of Cleveland. Naturally the route would be via Wheeling & Lake Erie, Cleveland and Nickel Plate, which is the direct route. We have rates to Ashtabula. The Wheeling & Lake Erie would not be the short route from all of its mines to destinations east of Cleveland. If some other line made the [fol. 1725] short route rate, naturally we would meet it. (1423) I presume there are instances of destinations east of Cleveland to which the Wheeling & Lake Erie is not the shortest route.

[fol. 1726] (The witness was thereupon asked a question to which Mr. Martin objected as not within the scope of his examination; argument was had, and the following occurred:)

(1424) Mr. Gutheim: What I want to elicit at this time is whether when the Wheeling & Lake Erie gave the Pittsburgh & West Virginia a substitute concurrence, that substitute concurrence empowered the Pittsburgh & West Virginia to publish from the Pittsburgh District to Cleveland any rates lower than $1.84 per net ton.

Mr. Martin: Well, without having it before me, I think I can answer that it did not empower the Pittsburgh & West Virginia to publish any rate lower than $1.84 to Cleveland. That is, we are speaking of commercial, track delivery rates, Mr. Gutheim, are we not?

Mr. Gutheim: Yes.

Mr. Martin: Not lake cargo rates? I think that so qualified my answer is correct, but it is subject to correction, and if I find there is any difference I will advise you.

Examiner Trezise: Is that satisfactory, Mr. Gutheim?

Mr. Gutheim: That is satisfactory.

[fol. 1727] Mr. Gutheim:

(1425) Referring to the fact that I show in my exhibit that on the distances I have computed a rate of $1.45 from Wheeling & Lake Erie No. 8 mines to Cleveland is proper, measured by the Docket 23922 scale, and that on the basis of the distances as I have computed them from the Pittsburgh District, if the same scale were applied the rate would be justifiable at $1.65, I do not know anything about refusing to authorize the Pittsburgh & West Virginia to publish anything less than $1.84, as against the other rate.

[fol. 1728] By Mr. Day:

(1427) The note at the bottom of each sheet of Exhibits 196 to 201: "Mileages shown are computed from Official Railroad Station lists", in reality should be eliminated because we have shown in the body of the exhibit that we have used the mileages as shown in the decisions of the Interstate Commerce Commission. (1428). With the exception of the Wheeling & Lake Erie at the top of the page, that is correct. If you will let me know just what destinations you

have in mind I will gladly check that decision, because it is my understanding, and I feel very confident, that these mileages are shown somewhere in the report of the Commission.

(1429) It is quite a job to check all these decisions, for this reason, that I do not have the most of them with me. A number of them I have right with me and I can check them, but I will attempt to check the decisions and perhaps note the page reference where they show the mileages.

(1430) I have here an analysis of all the decisions and the page references where the mileages are shown. Mr. Day is correct that the mileage from Griff to Vermillion, Macksville to Paris, Griff to Paris, and Griff to Conlogue, are apparently not shown in the decision because I have no page reference. That is also true as to the distance from Macksville to Mays and Griff to Dudley. The rest of them, apparently, are all shown in the decisions because I have page references to the decision.

[fol. 1729] Mr. Martin: Could it be understood, Mr. Examiner, that the witness will check the tariff authorities on those particular exceptional cases and supply them, and in the event the mileages are not correctly stated here that he may have an opportunity to amend them?

Examiner Trezise: I think that would be the only satisfactory disposition of it, if there are any variations as to the distances.

(Narrative continued:) I will not say that I purposely omitted the short haul points, such as Griff to Vermillion, referred to in the case 136 I. C. C. 543. (1431) I tried to take the various decisions where the mileage was comparable and use them against our direct mileage. If I have left some out, I will be glad to put them in, because you will note that I have included some citations where the earnings per car mile are higher than those produced by our rates. I would not take a 3 or 4-mile distance and compare it with 18 miles. I did not attempt or did not mean to leave out any comparable distances.

I have a map here that will show the location of the various mining groups shown in my exhibits 196 to 201. (1432) Group 10 in Illinois, shown on Exhibit 196, is Southern Illinois. From this group there are the Big Four, Illinois Central, L. & N., C, B. & Q., C. & E. I. There are some

more there but I cannot just make them out from the map. [fol. 1730] Group 14 centers around the line of the Chicago & Illinois Midland. It is the line of the C. & I. M. Group 6 is the Duquoin group, north of the Southern Illinois group. In the cases cited, 142 I. C. C. 95 and 161 I. C. C. 271, as dealing with rates from those groups to East St. Louis, I believe there were other rates also involved into East St. Louis. I do not show the rates from the Belleville District for this reason, that we considered those other groups to East St. Louis as not maximum reasonable rates. (1433) We have attempted only to show the maximum reasonable rate decisions of the Commission. I do not know off-hand if there was a rate prescribed by the Commission from the Belleville group to East St. Louis; I can check it. I believe it is contained in the decisions cited to which reference was just made.

Apparently the Southern is the only line which serves the Booneville group in Indiana, shown in my Exhibits 196 and 201. The Southern is the carrier that runs throughout the group. The so-called northern Illinois group is served by the Santa Fe, C. B. & Q., and Illinois Central, C. & N. W., C. R. I. & P., and a number of others; the Fulton-Peoria group by C. R. I. & P., T. P. & W., C. & N. W., C. B. & Q., M. & St. L., and others.

I show in Exhibit 196 and some of the succeeding exhibits an interstate route from the Grazil-Clinton group in Indiana to LaFayette, Indiana, with an interstate citation. (1434) I do not know that the Interstate routes between those points are extremely circuitous. I know that [fol. 1731] the particular citation is a citation of the Interstate Commerce Commission, and whether the route is circuitous or not I am not familiar enough with the territory to say. I did not mean I am not familiar with the location of LaFayette, Indiana, with relation to the Illinois-Indiana State Line. I meant that I am not familiar with the working routes of the various carriers in Indiana and Illinois on coal to various destinations. I do not know if such interstate routes are circuitous. I would have to sit down and check the routes to LaFayette to see how they route their traffic before I could. Off-hand I do not know.

(1435) A route from the Middle District of Ohio through Ashtabula, Ohio, to Cleveland would be circuitous compared

to the direct or short tariff route. I would say the same thing from an Indiana mine to an Indiana destination if it had to go quite a way into the other state. Of course, some of these Indiana mines are right on the state line and they could go outside of the state for 5 or 10 or 15 miles and come right back in again and it would not be necessarily circuitous. I mean the Brazil-Clinton mines. The Brazil-Clinton group is on the Illinois-Indiana State Line. (1436) I do not know the distance from the nearest point, but according to this map the state line is the western boundary of the Brazil-Clinton group. There was a reason for showing the same rates more than twice on the same sheet. That was because I compared them with different districts. I [fol. 1732] am comparing No. 8, Middle and Massillon Districts with other rates. You see, these three groups each represent a comparison with either the No. 8, Middle or Massillon District. I show rates from the Boonville group to Paris and Vermillion twice because they are different blocks. The first Boonville group to Paris is a distance of 146 miles, rate $1.20, earnings per ton-mile 8.69 mills. I compared that with our rate from mining points on the Wheeling & Lake Erie Railway in the No. 8 District to Cleveland, Ohio. The second group, the Boonville, Indiana, group to Paris, same distance, same rate, same earnings per ton-mile, I compared with our rate from the Middle District to Cleveland, Ohio.

(1437) Not all the comparisons of rates from all Indiana mines to the destinations shown in my Exhibits 196 to 201 were covered by the Commission's decision in Docket 23922; most of the comparisons, as I stated in my direct, are involved in 23922. Most of the rates shown on our exhibit are involved or were involved in the destination territory prescribed in 23922. I do not know any exceptions to that off-hand. Yes, there is one here, Blue Mound, Ill., which is outside of the destination territory. I have it on my map. I have them all on my map. Perhaps that is not on any of my exhibits, but my impression was that there were some points just outside of the 23922 scale territory.

[fol. 1733] (1438) The $1.45 rate from the No. 8 District, Wheeling & Lake Erie mines, to Cleveland is applicable via the Wheeling & Lake Erie local route and also applicable in connection with the Erie Railroad route. The application of that rate via the Wheeling & Lake Erie-Erie

Railroad route is voluntary by the Wheeling & Lake Erie, with the concurrence of the Erie Railroad.

I have not shown any distances from our Wheeling & Lake Erie No. 8 District mines to Cleveland computed over the Wheeling & Lake Erie-Erie Railroad route (1439), or via the Wheeling & Lake Erie local route and the Wheeling & Lake Erie-Erie Railroad route together.

I do not believe the rate of $1.45 to Cleveland from the Wheeling & Lake Erie No. 8 District mines is applicable via the Wheeling & Lake Erie from any other mines. I do not know off-hand if it is applicable from the Cambridge mines. I would have to check that. I have not computed any distances or shown any from the Cambridge District mines to Cleveland via the Wheeling & Lake Erie. I have not considered the Cambridge District at all.

By Mr. Orcutt:

(1440) The billing station definition as used in these exhibits is a billing station name shown alongside a mine in Davis' tariff. As a general rule, the billing station is the station from which the coal is billed. It is true that [fol. 1734] a number of mines will bill from one station. I did not say that I figured my mileages from the southern districts from the tipples. What I did state was that Mr. Ackerman in his exhibits and his advice to me shows that he figured the mileages from the tipples. I do not know whether they were from the tipples themselves, other than the information he has furnished me.

Redirect examination.

By Mr. Martin:

In connection with Mr. Bronson's cross examination this morning, where he asked me whether or not the mileages from the No. 8, Middle and Massillon Districts to the six destinations shown on my exhibits 203, 204, 205, 206, 207 and 208 were Wheeling & Lake Erie mileages, I have shown in my mileage exhibits the short tariff routes from all of the mines in the No. 8, Middle and Massillon Districts to these six destinations. (1440) In connection with my various rate exhibits, I have stated orally what those short tariff route averages are and the earnings produced

thereby. It is true that if anyone is interested in making a comparison between those and the compared rates used in my rate exhibits, it can be done from a reading of the testimony and an examination of the exhibits.

I was asked by Mr. Orcutt whether there is anything in the report of the Commission in I. & S. Docket No. 3619 to show that the ex-river rates from the Wheeling & Lake Erie river ports are maximum reasonable rates. I can [fol. 1735] refer to an expression in that report which indicates to me that the Commission regarded them as maximum reasonable rates. (1442) At page 221 of the Commission's report and order in I. & S. Docket No. 3619, Ex-Ohio River Coal to Cleveland, Lorain and other Ohio Points, 185 I. C. C., appears the following: "We are of the opinion that the Wheeling's ex-river rates should not be on a level which would result in barge-rail rates from the Pittsburgh, Connellsville and Fairmont Districts to the considered destinations lower than barge-rail rates based on the 77-cent rate to Youngstown under the findings in the Youngstown case, plus the existing all-rail differentials to the same destinations. Such a basis would result in rates of $1.27 from the Wheeling's river division points to Cleveland, Lorain and South Lorain, and $1.02 to Canton and Massillon." They there added to the 77-cent rate 50 cents as to Cleveland and Lorain and 25 cents as to Canton and Massillon.

In the last sentence of that paragraph the Commission said as follows: "Considering the difference in the distance these rates would be properly related to the 77-cent rate approved in the Youngstown case."

(1443) The 77-cent rate approved in the Youngstown case was there approved as a maximum reasonable rate.

My rate exhibits were introduced to justify both the rates from the origin districts, No. 8, Middle and Massillon, to the destinations in question, and from the Wheeling & Lake Erie mines to those destinations, the Wheeling and [fol. 1736] Lake Erie mines being parts of the origin groups.

I was also asked as to apparent discrepancies between the list of active mines submitted by me and the statement of mines which was handed by me to Mr. Hall this morning in connection with Mr. Durham's cost study. I am familiar with the period covered by that cost study. The

period covered by the cost study was the months of January and July, 1930, and January and July, 1931. It is my understanding the list which I handed to Mr. Hall contained the mines from which coal was shipped during those four months.

(1444) My list of active mines covers a different period. It covers the period July 1, 1931, to and including September 15, 1932. That is the period selected by Mr. Kern for his study in this case. It is true that includes only one of the four months included in Mr. Durham's cost study, and the other three months are not included at all. If mines which shipped during the first three months of Mr. Durham's four months ceased to ship by July 1, 1931, they would not be included in my list.

I was asked by Mr. Gutheim as to the differences between the so-called engineering department distances, or distances based on engineering department mileages, and distances based on billing station mileages. (1445) By referring to Exhibit 168 it will be noted that we have shown [fol. 1737] four formulas. The one named and described by Note A is computed based on engineering department distances.

The Note B formula is computed based on using all of the mines and shipping points as shown in Davis' tariff, and also by the use of the engineering department formula or by the use of the engineering department formula figures to the first station enroute to destination.

The Note C formula is computed based on the active mines and also covers engineering department figures from the tipple.

Note D is similar in all respects to Note B, with the exception that we have used the distances from the billing stations, instead of distances from the tipples.

Disregarding the active mine formula for a moment, there is very little difference between the other three methods; in the case of Cleveland, a fraction of a mile. That is generally true as to the other No. 8 mileages. That supports Mr. Kern's statement that, if the tipple mileage had been used (1446), instead of the billing point mileage, it would produce approximately the same average distance. It is true, since the billing station may lie on either side of the mine, as Mr. Gutheim pointed out this *this* morning, the law of averages brings you back to about

the same result, whether you take the billing station or the tipple. In my figures of mileages in my rate exhibits I am not relying on mileages computed by the engineering department method only. We have used various formulas; [fol. 1738] and, inasmuch as they all produced approximately the same result, we used our engineering department mileages. But, if we had used our other mileages, it would not make any material difference in the result.

I might also call attention to Exhibit 173, which is similar to Exhibit 168, but covers Canton and Massillon as destination points, and the same is true to Canton and Massillon. That is, no matter what formula is used, it gives you approximately the same result.

It is true that my effort here has been to show as much information concerning these mileages as was available to me (1447), in order that the Commission might have before it the fullest information which I could produce.

Concerning the questions of Mr. Gutheim this afternoon, this Wheeling & Lake Erie-Erie route to Cleveland is not a short tariff route from the No. 8 District. I have not disregarded any short tariff route. We have tried to take the shortest tariff route from the mining point on each line. The shortest tariff route from the Wheeling & Lake Erie mines to Cleveland is in connection with the Baltimore & Ohio Railroad. In any event, it would not be this Wheeling & Lake Erie-Erie route. All of the routes which I have shown are tariff routes; they all have rates applicable to them.

Recross-examination.

By Mr. Bull:

(1448) I do not show in any of my exhibits the average distance via all tariff routes from Ohio No. 8 to Cleve- [fol. 1739] land. We show the average distance via the short tariff route. In no instance do we show the average distance via all tariff routes. The short tariff route was used in all cases from Ohio points as well as points outside of Ohio.

By Mr. Keeler:

(1449) An average of the short tariff routes is used. Each railroad serving a particular district has a short

tariff route, I mean each mine has; and the average of these short tariff routes is used in these computations, from districts other than the Wheeling districts and also from the Wheeling districts.

Our Exhibit 174 reads, in the caption, "Statement Showing Average Distances via Shortest Existing Tariff Route from Mining Points in the No. 8 District of Ohio on the Wheeling & Lake Erie Railway, Pittsburgh & West Virginia Railway, New York Central Railroad, Baltimore & Ohio Railroad and Pennsylvania Railroad to Cleveland, Lorain (South Lorain), Huron and Akron, Ohio."

The shortest tariff route to Cleveland from the Wheeling & Lake Erie mines is in connection with the Baltimore & Ohio; but the (1450) short tariff route from each mine on all railroads would not necessarily be via the Baltimore & Ohio.

Redirect examination.

By Mr. Martin:

In my mileage exhibits I have shown not only the Wheeling & Lake Erie direct mileages from Wheeling & Lake Erie mines to the six destinations, but I have also [fol. 1740] shown the average of the short tariff routes from the three Ohio districts to the six destinations. In my rate exhibits, as distinguished from my mileage exhibits, I have used, for the distances from the three Ohio districts to the six destinations, the Wheeling & Lake Erie direct mileages. In my explanation of those exhibits I have stated, as I put the exhibits in, the average short tariff route mileages from the three districts to the six destinations, and I have stated the earnings accruing therefrom. It is true that if anyone wants to substitute those short tariff route mileages for the Wheeling & Lake Erie direct mileages on my exhibits, he can do so by transferring them from the transcript (1451) to the exhibit. So that it is in both ways.

It is right that as to the mileages from districts outside of Ohio that I have used in Exhibits 203 and following, those are average short tariff route mileages furnished me by Mr. Ackerman, and will be explained by him later in detail.

Recross-examination.

By Mr. Bronson:

Referring to Sheet 2, Exhibit 174, I use fractions of miles to Cleveland and Akron while to Lorain and Huron I do not, due to the fact that the connection which makes the short tariff route publishes fractions of miles. Now, the Wheeling & Lake Erie in its mileage tariffs does not show any fractions.

[fol. 1741] Against the Nicholson mine No. 1 to Cleveland we show Route A. (1452) Route A is explained at the bottom of the page as being via Wheeling & Lake Erie, Valley Junction and B. & O. Now, the B. & O. in their mileage tariff show fractions of a mile. Therefore, you have fractions in your total mileage to Cleveland, while the Wheeling to Lorain and Huron in its own tariff does not so show.

Regarding the ex-river rate of $1.27, that rate was prescribed by the Commission to Cleveland. I do not know whether it was prescribed as a maximum or as a minimum rate. I know that the Commission in arriving at their rate added the all-rail differential to a maximum rate of 77 cents. I do not understand we were privileged to publish a lower rate than $1.27. That rate might be considered as an absolute rate—both a maximum and minimum rate.

By Mr. Orcutt:

(1453) It is not necessarily my view that where the Commission says that a rate shall not be on a level other than a certain figure, that certain figure is to be considered a maximum rate. I considered it as a maximum rate as to these ex-river rates. I considered it as a maximum reasonable rate. Even though the Commission said that the rate should not be on a lower level than a certain figure, I still consider it a maximum reasonable rate.

[fol. 1742] J. A. McCort was called as a witness and, having been duly sworn, testified as follows:

Direct examination.

By Mr. Martin:

(1454) My name is J. A. McCort; address, Cleveland, Ohio; auditor of the Wheeling & Lake Erie Railway Com-

pany. I have been in the employ of the company approximately 25 years, three of which were in the operating department, the remaining period of service having been in the accounting department in various capacities, serving eight years as Auditor.

I have had a statement prepared showing various statistics of railroads serving the Ohio No. 8 coal district, relating to their operations within the State of Ohio for the year ended December 31, 1930, which I desire to offer as Exhibit 215.

(Exhibit 215, Witness McCort, received in evidence.)

The basic data from which these operating averages were computed was obtained from annual reports of the carriers to the Public Utilities Commission of Ohio (1455) for the year ended December 31, 1930. The average number of revenue ton miles per mile of road operated, shown in Column 1, was arrived at by dividing the total revenue ton miles by the average miles of road operated as reported on pages 904 and 905.

The average number of revenue ton miles per mile of main track operated, shown in Column 2, was obtained by dividing the total revenue ton miles by the miles of main [fol. 1743] track operated at the close of the year, the latter being reported on page 801.

The average number of revenue ton miles per freight train mile, shown in Column 3, was arrived at by dividing the total revenue ton miles by the total freight train miles, including proportion of mixed train miles reported on page 904.

The average number of revenue ton miles per loaded freight car mile, shown in Column 4, was obtained by dividing the total revenue ton miles by the total loaded freight car miles, including the loaded freight car miles made in mixed and special trains.

The figures for the State of Ohio of these railroads are shown in the exhibit. They do not include any figures for service outside of the State of Ohio (1456).

I have had prepared a statement showing various operating statistics for the States of Indiana and Illinois for the year ended December 31, 1930, of railroads serving origin and/or destination territories affected by I. C. C. Docket No. 23922, 185 I. C. C. 225, compared with similar

data for the Wheeling & Lake Erie Railway Company, which I desire to offer as Exhibit 216.

(Exhibit 216, Witness McCort, received in evidence.)

This exhibit shows operating averages similar to those shown by the preceding exhibit, No. 215, and was prepared in the same manner. The basic data was obtained from the annual reports of the carriers to the Public Service [fol. 1744] Commission of Indiana and the Illinois Commerce Commission for the year ended December 31, 1930, excepting that of the Wheeling & Lake Erie Railway, which, as previously stated, was taken from its annual report to the Public Utilities Commission of Ohio.

By comparing my previous exhibit, 215, with this exhibit, it will be found that the average traffic density per mile of road operated and the train loading of the carriers (1457) serving the Ohio No. 8 coal district are considerably heavier than the average for the States of Indiana and Illinois of the carriers serving the 23922 territory; the traffic density and the train loading being approximately 42.9 per cent and 28.6 per cent greater, respectively. The average number of tons per car mile, or the average loading per car, is approximately three tons heavier.

Comparison of the average operating statistics for the States of Indiana and Illinois of this group of carriers with similar statistics for the Wheeling & Lake Erie is shown near the foot of the exhibit. It shows that, while the traffic density of the Wheeling is 30.2 per cent greater than that of the other two groups, its train loading is 27.8 per cent greater, and its average loading per car is 59.7 per cent greater, which indicates that its traffic is handled with the use of relatively fewer freight cars and freight trains.

The figures shown in the first portion of this exhibit are [fol. 1745] for operations wholly within the State of Indiana; in the next portion for operations wholly within the state of Illinois. The comparison which I have made between the Indiana and Illinois lines and the Wheeling & Lake Erie on the face (1458) of this Exhibit 216, can also be made as between the Indiana and Illinois lines, on the one hand, and all of the carriers serving the Ohio No. 8 coal district, on the other, by comparing Exhibits 216 and 215.

I have had prepared a statement showing various statistics for the States of Indiana and Illinois for the year ended December 31, 1930, of railroads serving the origin territory shown on Exhibits 196 to 201, inclusive, compared with similar data of the Wheeling & Lake Erie Railway, which I desire to introduce as Exhibit 217.

(Exhibit 217, Witness McCort, received in evidence.)

This exhibit also shows operating averages similar to my two previous exhibits and was similarly prepared. Page 1 relates to railroads serving the origin territory in Indiana shown on Exhibits 196 to 201, inclusive. Page 2 relates to railroads serving the origin territory in Illinois shown on Exhibits 196 to 201, inclusive. While the group of Illinois carriers has been greatly enlarged in comparison with the number of roads serving the 23922 territory, there is no substantial difference in the average statistics.

The same comparison can be made between this Exhibit [fol. 1746] 217 and Exhibit 215 as I spoke of before in connection with (1459) the comparison between Exhibit 216 and 215.

I have caused some data relating to the consumers and industrial markets in the destination territory included in I. C. C. No. 23922 and in the territory to which reduced rates on bituminous coal from mines on the Wheeling & Lake Erie Railway apply, to be taken from the Market Data Hand Book of the United States as published by the United States Department of Commerce, Bureau of Foreign and Domestic Commerce, Domestic Commerce Series No. 30, and General Consumer Market Statistics, Supplement No. 1 to the Market Data Hand Book of the United States, which is in statement form, and I should like to introduce it at this time as Exhibit 218.

(Exhibit 218, Witness McCort, received in evidence.)

This exhibit is entitled "Market Data Relating to Counties included in whole or in part (1) in the Destination Territory Described in I. C. C. Docket No. 23922 and (2) in the Territory to which Reduced Rates on Bituminous Coal from Mines on the Wheeling & Lake Erie Railway apply."

Under the sub-caption "Consumers Market" there is shown, as to each territory, separately, population, area in

square miles, population per square mile, manufacturing (1460) and number of trade outlets.

Under the sub-caption "Industrial Market" there is shown, separately, for each of the territories, number of establishments, average number of wage earners, and cer- [fol. 1747] tain data with respect to manufacturing.

In the compilation of this data, it was found that in the Illinois territory the information for each county was not in every instance shown separately. This was due, I believe, to the desire to avoid disclosing information with respect to certain industries. It has, therefore, been necessary in order to make the information more complete, to include in the 23922 territory twelve more counties than would have been included had full information for all of the counties embraced in that territory been available. That is true as to the items which are marked with an asterisk only.

It will be noted from this exhibit that the population per square mile in the Wheeling & Lake Erie destination territory, as of 1930, was more than eight times as great as in the 23922 territory; that the value of products of manufacturing for consumers' market as of the year 1929 was approximately eleven times greater in the Wheeling & Lake Erie destination territory than in the territory covered by (1461) 23922, and that the value of the products of manufacturing for industrial market in the Wheeling and Lake Erie Railway destination territory was also approximately eleven times greater than that in the 23922 territory.

From the report of the Tax Commission of Illinois for the year 1930, and from the returns of individual carriers to the Tax Commission of Ohio for the year ended January 1, [fol. 1748] 1931, we have compared certain supplemental information which shows that the total population per mile of main track in the 23922 territory is 283, as compared with 1,415 in the Wheeling & Lake Erie destination territory, although the route miles of main track per square mile is 5.48 in the 23922 territory, as compared with 3.37 in the Wheeling & Lake Erie Railway destination territory.

Cross-examination.

By Mr. Day:

In my Exhibit 215, column 1, "Miles of Road Operated,"

those figures are the mileages operated within the State of Ohio, and only Ohio. For the New York Central, those figures would include the Big Four.

(1462) As to why the loaded freight car mile figure for the New York Central does not vary even one-hundredth of 1 per cent in either Ohio, Indiana or Illinois, I am afraid you will have to ask the New York Central about that, because we have taken the figures exactly as they have reported them to the State Commissions, and they do not show the basis of the separation of their ton miles as between the states. They are supposed to be both intrastate and interstate, and regardless of the direction in which the traffic moves.

As to Exhibit 216, the railroads used there in Indiana and Illinois and consolidated Indiana and Illinois, are not intended to be a complete list of the railroads in those states. [fol. 1749] It is all the principal carriers serving the 23922 territory, both origin and destination. (1463) As to the statement in the caption, "Serving origin and/or destination territories," I think the Wabash is the exception there. As I understand, the Wabash does not originate any coal, but it does serve the destination territory. I am under the impression that the Kansas & Sidell originates coal, although I could not say definitely. I do not think the Illinois Terminal serves the 23922 territory. In any case, it is correct this is intended to be a complete list of the origin and/or destination lines serving the 23922 territory.

The figures shown in my Exhibits 215, 216 and 217, for loaded freight car miles, would only indicate the average weight of the lading per car. (1464) In Exhibit 216, it is correct that in the first column, "Miles of road operated" I show that in Indiana the Wabash has a much higher figure than any of the other railroads named, according to their returns to the State Commissions. It indicates a low mileage and a heavy traffic. The Wabash originates no coal in Indiana. I stated that a few moments ago. It is a destination line in Illinois under this 23922 scale. The Milwaukee, the C. M. St. P. & P. has no particular mileage in Illinois in what is known as the 23922 territory. It serves the origin territory there, I think, rather than the destination territory. I show it in Illinois as well as in Indiana. I show the [fol. 1750] Southern for the same reason. As I understand it, the Louisville & Nashville does not serve this territory.

(1465) As I understand, it does not publish any rates from the origin groups into this destination territory.

Referring to Exhibit 217, Railroads Serving Origin Territory in Illinois, I do not have the information as to which of the railroads named are coal originating roads in Illinois. It is my understanding that those roads originate coal traffic, but I do not have the figures to show that. I only know all these roads serve the origin territory. I could not state definitely whether or not they do originate coal. As to having all of the railroads originating coal in Illinois in this list, I have used those carriers which serve the origin territory covered by Mr. Adell's Exhibits 196 to 201, inclusive. I did not put in all the lines in the Belleville group—for instance, the St. Louis, Troy & Eastern.

(1466) Examiner Trezise: Mr. McCort, did you know that the railroads in making their annual reports to the States of Illinois and Ohio may also file a statement with those reports to the effect that an attempt to divide revenue on state lines is unsatisfactory and that the figures presented are not regarded as accurate, but that they have merely attempted to comply with the requirements of the State?

The Witness: Of course, I have used no revenue figures.

[fol. 1751] Examiner Trezise: You have not. Your loaded freight car mileage was not such a figure?

The Witness: It had no relation to revenue. The mileage should be reasonably accurately compiled.

Examiner Trezise: I see. Thank you. You have shown the source down here on the exhibit (indicating) as being the annual reports of these two commissions, and I was wondering whether you had in any way used revenue to divide on the state line.

The Witness: No, sir.

Examiner Trezise: Thank you.

By Mr. Gutheim:

Q. Mr. McCort, I believe I heard you say very definitely, with respect to Indiana and Illinois, that the tonnage that was used in determining the density figures and the consequent ton miles was the tonnage and the ton miles handled within each particular state. Is that correct?

A. It is the total revenue ton mileage reported by each carrier (1467) to the Commissions of those states, and covers only the revenue ton miles in each of the particular states referred to.

Examiner Trezise: And divided on the state line?

The Witness: I made no division. The carriers made their own separation.

Examiner Trezise: That was the point I was getting at. I [fol. 1752] referred to revenue; but your figures are taken from the state reports, and, if they are taken from the state reports, and there is a mileage shown as being within one of these states, it must be divided on the state line?

The Witness: Maybe I misunderstood your original question, Mr. Examiner, but each carrier reports to these State Commissions the revenue ton miles that are applicable to traffic moving within each of these states.

Examiner Trezise: And must necessarily stop at the state line?

The Witness: That is right.

Examiner Trezise: Thank you.

By Mr. Gutheim:

As to the Ohio lines, all of the annual reports to these Commissions are prepared and rendered on the same basis. The same form of report is used.

(1468) My attention has been called to the fact that in the case of the New York Central the loaded freight car mile average is the same, 22.97, in Ohio, in Indiana and in Illinois; and also that the figure in the column headed "Freight Train Mile" for the New York Central, 797.68, is the same in Ohio, Indiana and Illinois. As to whether the New York Central has reported anything but a system average with respect to these units, of course the figures would indicate that they have used some mileage basis of splitting their [fol. 1753] total figures as between states. There is no information shown on the returns as to what the basis may have been. All I have shown here is what has been in the annual reports of these carriers to the State Commissions. That was all I could do.

Redirect examination.

By Mr. Martin:

I assume the road which was referred to as the Illinois Terminal Company and as being a destination carrier in the 23922 territory is the Illinois Traction Company. I do not know that definitely. (1469) I do not know that the Illinois Terminal Company actually serves that territory.

Referring to the map of the 23922 territory, Durham Exhibit 143, I find that the Southern Railway not only serves the origin fields known as Booneville, Evansville and Princeton-Ayrshire in Indiana, but also the southern part of the 23922 destination territory.

On my Exhibit 217, the blank in the heading should be "Exhibits Nos. 196 to 201, inclusive."

Recross-examination.

By Mr. Bull:

My figures for the Wheeling & Lake Erie do not include the Lorain & West Virginia; it is just Wheeling & Lake Erie.

By Mr. Henry C. Hall:

Referring to Exhibits 215, 216 and 217, our comparison was all within the State of Ohio.

[fol. 1754] By Mr. McVann:

(1470) If the operations of the Lorain & West Virginia had been included with the Wheeling & Lake Erie, it would have very little effect upon these figures. It would not alter them in any appreciable amount.

By Mr. Bull:

The New York Central figures, as I said, included the Big Four. The Big Four was not shown separately in these reports; they were consolidated as one company.

By Mr. Gutheim:

The termini of the Lorain & West Virginia are Wellington on the south and South Lorain on the north. The distance between the two is about 25 miles (1471).

CHARLES REITELL was called as a witness, and having been duly sworn, testified as follows:

Direct examination.

By Mr. Fickenscher:

My name is Charles Reitell; address, Harrisburg, Pa. I am employed by the Public Service Commission of Pennsylvania to make special studies of bituminous coal. I was transferred there three months ago from the Greater Pennsylvania Institute, where we had been carrying on studies of soft coal covering a period of about two years.

The bituminous coal industry of Pennsylvania is in very [fol. 1755] serious straits. The last two decades bear witness to an economic collapse in this, the major industry of the state. This soft coal disaster has fallen so heavily upon central and western Pennsylvania that untold suffering, misery and unemployment are blighting and have blighted these areas for years.

The Public Service Commission of Pennsylvania feels that this decline is due to a shift in the industry from the northern fields of Pennsylvania and Ohio to the southern fields of Virginia, Kentucky and southern West Virginia, and that this shift occurs in part because of the freight rate structures that make possible mines, far distant from (1472) markets, able to so successfully compete with the near-to-market mines as to drive them out of existence.

Right now, in addition to this disastrous transfer of the industry to the southern fields, Pennsylvania sees the birth of another shift that is bound to heap further economic havoc upon her.

The issues in this case are vital to Pennsylvania's economic life. Before the Ohio Public Service Commission required and authorized a spread in the established differential relationship (which I am told approximates a one-sixth drop in their soft coal freight rates), Pennsylvania enjoyed markets in Ohio that amounted to over ten million of tons annually. These markets have not been highly fluctuating ones, but steady, healthy markets existing over many years.

[fol. 1756] For instance, the shipments from Pennsylvania into Ohio for the following years show:

For 1923	11,396,000 tons
1924	10,748,000 tons
1925	11,317,000 tons
1926	12,118,000 tons
1927	11,352,000 tons
1928	13,024,000 tons
1929	13,623,000 tons
1930	10,657,000 tons
1931	7,195,000 tons

(1473) The Public Service Commission of Pennsylvania, therefore, asks that the differential relationships existing between Ohio and Pennsylvania prior to the action of the Ohio Commission as of August 1, 1932, be reestablished.

I have caused to be prepared five exhibits. The first exhibit, which is 219, is entitled "Bituminous Coal Production by Selected States, 1913-1931."

(Exhibit 219, Witness Reitell, received in evidence.)

Exhibit 220 is titled "Bituminous Coal Production by Selected States."

(Exhibit 220, Witness Reitell, received in evidence.)

Exhibit 221 is titled "Men Employed in Soft Coal Production by Selected States, 1913-1931".

(Exhibit 221, Witness Reitell, received in evidence.)

The next exhibit, 222, is titled "Soft Coal Statistics on Western Pennsylvania Coal-Producing Counties".

[fol. 1757] (Exhibit 222, Witness Reitell, received in evidence.)

And the last exhibit, 223, is titled "Number of Bituminous Coal Mines in Pennsylvania and Ohio, 1913-1931".

(Exhibit 223, Witness Reitell, received in evidence.)

(1474) This first Exhibit, 219, as well as several of the other ones, portrays only one thing, namely, a comparison of the Ohio and Pennsylvania coal business trends over a period of years as contrasted with West Virginia and Kentucky.

I think that, if you will give close scrutiny to the graph, as well as the statistics, you can see that Pennsylvania, which is represented by the heavy solid line, and Ohio, which is represented by the even dash line, show a downward trend over the period of years covered.

In contrast to that, we have the Southern States of Kentucky and West Virginia moving in the other direction. In other words, Ohio and Pennsylvania have been pretty much together in the downward shift. I think that probably is better portrayed in summary form on Exhibit 220, in which I have combined the two southern states and the two northern states. You will notice that in 1913 70 per cent of the coal production was in the two northern states, while 18 years later it had dropped to the Northern States having but 46 per cent of the production.

This shift can be further seen, I believe, in the number of [fol. 1758] men employed—the next exhibit. (1475). You will note again that Pennsylvania and Ohio show a downward trend, while West Virginia and Kentucky move in the other direction, except for the last few years of the depression.

Now, gentlemen, those three charts are put in simply to call to your attention what, I believe, is well known by you all: that Ohio and Pennsylvania have seen an economic shift to the southern fields.

The next chart calls attention to what has happened to our counties in Pennsylvania which are directly affected by and interested in the Ohio shipments. These are the western counties of Pennsylvania—Fayette, Washington, Allegheny, Westmoreland, Greene and Butler. I have here presented the economic coal history of those six counties from 1920 to date under their coal production and under the value of their coal production and under the number of employes.

Taking up the bituminous coal production in 1920 and taking it in 1921, 1925, 1930 and 1931, you will notice that those counties have dropped from 98,000,000 tons in 1920 to 57,000,000 tons in 1931.

Still greater has been the drop in value of the coal production, these western Pennsylvania counties having dropped from $317,000,000 in 1920 to $84,000,000 in 1931.

Probably, gentlemen, the most serious thing that we have

facing us in the present depression in Pennsylvania is the [fol. 1759] unemployment in the bituminous coal industry. That situation (1476), however, is not a situation which has been brought about in the last few years covering the depression. Mr. Hall here, a former Commissioner, will probably remember that in 1925 I testified before the Interstate Commerce Commission in the lake cargo case and introduced exhibits which showed that already at that time a serious condition of unemployment was besetting western Pennsylvania; and that situation continues today.

There is one more chart, gentlemen, covering the number of bituminous coal mines, and I again wish to call to your attention the fact that Ohio and Pennsylvania are pretty much following the same path up and down.

Now, the purpose of the Public Service Commission of Pennsylvania in coming here before you today is to ask that Pennsylvania be not further handicapped in this, its major industry, by establishing new rate relationships, which, I think you will agree, are bound to mean a shift of our industry over across the western line into Ohio. All we pray for is that those differential relationships that existed prior to August 1st, 1932, be maintained.

Cross-examination.

By Mr. Carter Hall:

I did not say that the condition of Ohio as compared with Pennsylvania is very much better, as indicated by my trends and charts. (1477) As to Exhibit 223 showing, in number of mines, that Ohio is relatively a smaller dis- [fol. 1760] tance below the highest point in Pennsylvania, the chart may indicate that Ohio has suffered less than Pennsylvania only in the droppage in the number of mines; but I do not want to draw any conclusion regarding employment from that chart. I would not say that the chart shown in Exhibit 221 shows that Ohio has suffered less from the standpoint of unemployment than has Pennsylvania. I would not say that the line that shows the trend in Ohio is very much closer to a straight line than the line which shows the trend in Pennsylvania. (1478) I would not say that that is so simply because you have a bigger drop and more men, proportionately. I would say that the

drops are about the same. Referring to Exhibit 219, you will find that Ohio has dropped from 36,000,000 tons in 1913 to 20,000,000 tons in 1931. I think you will find that that is a drop of about 40 per cent; isn't it? Now, take Pennsylvania. It has dropped from 173,000,000 tons in 1913 to 97,000,000 tons in 1931. Pennsylvania has not dropped more than Ohio in percentage. It looks so on the chart, because you have a bigger output of coal. The charts very materially convey the impression I intended them to. (1479) In other words, you have Pennsylvania producing much more, and, therefore, if you will look at the charts carefully you will find, I think, that the proportionate drops are very much on a parity. To get the right perspective [fol. 1761] you have to look at the figures as well as the charts.

By Mr. Ballard:

Referring to the tonnage from Pennsylvania into Ohio, which I gave for a period of years, that comes from all Pennsylvania origin districts and covers both high and low volatile. It would include low volatile coal from central Pennsylvania; all origin districts, also include Connellsville by-product coal. I have no information as to how much of it is competitive with Ohio coal.

By Mr. Bronson:

(1480) Referring to Exhibit 220, it is not true that Pennsylvania's loss in coal production was considerably more on a percentage basis than Ohio's loss. You will find that 8 per cent is to 12 per cent about 66-2/3 per cent, and that 38 per cent to 58 per cent is a little less than—yes; you are right. There is a more serious drop shown in Pennsylvania than in Ohio. It is slightly greater.

By Mr. Burgess:

I have figures as to the output of coal per man per day in Pennsylvania as compared with Ohio, but I would not like to try to quote them from memory. It is correct that the output per man per day is somewhat higher in Pennsylvania than it is in Ohio.

Referring to Exhibit 222, as to what producing districts

these various counties are located in: (1481) Fayette County is in the Connellsville District; Washington County in the Pittsburgh District; Allegheny County in the Pitts-
[fol. 1762] burgh District—I am not sure about Westmoreland, because I am thinking of Westmoreland as a district. Westbound, I understand, it comes in with the Pittsburgh district. Butler County would be in Reynoldsville district, I think, and the Mercer-Butler and Freeport Districts are in Butler County.

None of these freight rate districts are coterminous.

[fol. 1763] (1485) Mr. Webber: If this is the proper time, I want to file a correction of Exhibit 87, which was offered by Mr. Monroe.

The reason for revising the exhibit is that it had an incorrect figure in it as to the tons of coal originated on the Lorain & West Virginia. I think Mr. Martin called attention to that at the Columbus hearing.

[fol. 1764] Testimony Taken at Washington, D. C., January 9, 1933

(1487) Mr. Martin: I should like to supply certain information to satisfy the requests of Mr. Bull and Mr. Hall. Mr. Bull asked for information to show the breakdown of the by-product coal moving into Cleveland, by districts, from the Pittsburgh district and the Connellsville district for the years 1926 to 1931, inclusive. We gave the average annual figure for that period for the three districts as a whole. I now give the breakdown of the average annual figure as among the three districts.

I will first give it to Cleveland. From the Pittsburgh district, 57,965 tons; from the Connellsville district, 910,658 tons; from the Fairmont district, 600,312 tons—a total of 1,568,935 tons to Cleveland.

(1488) Now, to Lorain, from the Pittsburgh district, nothing; from the Connellsville district, 1,049,410; from the Fairmont district, nothing.

Now, as to the requests by Mr. Gutheim and by Mr. Hall, I believe, as to the total coal originated on the lines of the Wheeling & Lake Erie Railway Company in the No. 8
[fol. 1765] district and moving to the six destinations,

Cleveland, Lorain, Akron, Canton, Huron and Massillon, for the years 1930 and 1931, all of that information can be obtained from our Exhibit No. 144, except the information as to Huron; and, as to Huron, the tonnage other than lake cargo, but including coal for vessel fuel, was 18,420 tons for the year 1930 and 15,098 tons for the year 1931.

As to Mr. Gutheim's request for the Wheeling & Lake Erie Railway Company's total operating ratios and freight operating ratios for the years 1930 and 1931, I desire to supply the following information:

Year 1930, freight operating ratio, 70.97 per cent; total operating ratio, 73.22 per cent.

Year 1931, freight operating ratio, 76.70 per cent; total operating ratio, 79.67 per cent.

Years 1930 and 1931 combined, freight operating ratio, 73.36 per cent; total operating ratio, 75.90 per cent.

Responsive to Mr. Hall's request for the total originated coal tonnage on the Wheeling & Lake Erie Railway (1489) system for the years 1930 and 1931 from all districts to all destinations, I supply the following information:

[fol. 1766] As to the year 1930, 2,885,144 tons; 1931, 2,540,219.

So far as I am advised, Mr. Examiner, this information that I have supplied this morning satisfies all outstanding requests for information from the Wheeling & Lake Erie. If there are any others that I have omitted, I will be glad to have them called to my attention.

[fol. 1767] Lawrence Petersen, having been previously sworn, was recalled and testified as follows:

Direct examination.

By Mr. Keeler:

(1489) I am the same Mr. Petersen who was sworn and gave testimony previously in these proceedings.

I have had prepared certain additional exhibits and gathered certain additional data which I now desire to introduce in evidence on behalf of complainants in No. 25666 and certain interveners (1490) whose petitions were presented at the Columbus hearing. These exhibits and data are true and correct to the best of my knowledge and belief.

(1490) Before taking up my exhibits I desire to deal briefly, in the form of oral testimony, with the history of rates on coal to the destination area here involved from Monongahela Railway mines as contrasted with rates on coal from the Pittsburgh and Connellsville districts, and similarly with certain other matters to which I shall advert. Prior to 1914, the Monongahela Railway extended only as far south as approximately the Pennsylvania-West Virginia state line. That portion of the Monongahela was considered as part of the Connellsville district rate group. In 1914 the Monongahela was extended southward through West Virginia to Fairmont and that portion of the line was [fol. 1768] given the same rates as the portion of the line in Pennsylvania, namely, the Connellsville basis.

This parity of rates as between the section of the Monongahela in Pennsylvania and the part in West Virginia continued until August 30, 1917, when this parity was disturbed as the result of, but not required by, the order in I. & S. 774, 46 I. C. C. 117. At the time of the (1490) hearings in I. & S. 774, Connellsville district rates, including all the Monongahela Railway points, were 15 cents per ton over Pittsburgh, both to affected territory and to Cleveland and Youngstown. The general rate situation that the Commission was called upon to determine in that proceeding, I. & S. 774, involved principally rates to so-called affected territory. Certain Connellsville group producers intervened in that proceeding, however, and specifically raised the issue of the relationship between the rates from their mines in the Connellsville group in Pennsylvania and the rates from the Pittsburgh district to both affected territory and substantially the area of destination involved in the instant proceedings.

No such issue was specifically raised as to the rates from mines on the Monongahela Railway in West Virginia to Cleveland and other points in northeastern Ohio. As the [fol. 1769] result of the intervention and presentation of the Connellsville group operators in Pennsylvania, the Commission found that the then existing differential of 15 cents Connellsville over Pittsburgh was unlawful; that Connellsville should take the same rates as Pittsburgh generally to points west of the Sandusky-Galion line and should not exceed the rates from Pittsburgh by more than 6 cents to Cleveland and other points in northern Ohio east

of the Sandusky-Galion line except to Youngstown and points taking (1492) the same rate, where the differential should not exceed 8 cents over Pittsburgh. (See page 145, 46 I. C. C.)

The Commission's decision indicates that the average distance, based on respondents' compilations, Connellsville group mines in Pennsylvania over Pittsburgh was 45 miles to Cleveland and 41 miles to Youngstown. In complying with the decision in I. & S. 774, the carriers did not keep that portion of the Monongahela Railway in West Virginia on the Connellsville basis to points in Ohio east of the Sandusky-Galion line but published the differentials which the Commission prescribed only from points in the Connellsville group located in Pennsylvania. Points on the Monongahela in West Virginia were retained, inprop- [fol. 1770] erly, I think, on the previously existing basis of 15 cents over Pittsburgh, this also being the basis existing from points in the Fairmont district groups served exclusively by the B. & O. located south of the Monongahela Railway.

While the report of the Commission in I. & S. 774 treats the Monongahela Railway mines in West Virginia as a part of the Fairmont group to affected territory, this was in error for at that time all mines on the Monongahela were grouped with or took the same rates as Connellsville or 15 cents per ton over the Pittsburgh group mines and Fairmont group mines on the B. & O. It was not until publication of rates following I. & S. 774 that there was a distinction (1493) drawn between mines on the Monongahela in Pennsylvania and those in West Virginia. Since I. & S. 774, mines in the Connellsville group, including all mines on the Monongahela Railway in both Pennsylvania and West Virginia and mines in the Fairmont groups served by the B. & O., have been on a rate parity to affected territory.

As will be shown later by our rate exhibits, Monongahela Railway mines in West Virginia today take differentials over Connellsville group mines in Pennsylvania to the des- [fol. 1771] tination territory here involved ranging from 9 cents at Cleveland to 22 cents at Massillon. Fairmont group mines served by the B. & O. in the Fairmont district take the same rates as Connellsville group mines to certain destinations in the area here involved, and dif-

ferentials ranging from 6 cents less than Connellsville to 17 cents over Connellsville to other destinations. Cleveland is by far the most important single destination in the territory here under consideration, but other points are also important.

As to the rates that should apply from the Monongahela Railway mines in West Virginia to the destination territory involved in these proceedings, it is our position that these mines are or should properly be a part of the Connellsville group and should take the same rates as points in that group.

(1494) Eastbound the Monongahela Railway mines all take the same rates as mines in the Connellsville district, they being a part of the large Westmoreland-West Virginia group extending from Butler, north of Pittsburgh to and including, generally speaking, all of the mines in the West Virginia area indicated on my Exhibit 126. Northbound to the Buffalo area no distinction is made between rates from points on the Monongahela Railway in West Virginia and [fol. 1772] in Pennsylvania, all being treated as a part of the Connellsville group. The differential here Connellsville over Pittsburgh is 15 cents. That differential was before the Commission in the Lackawanna Steel case, 87 I. C. C. 383. In that case the 15-cent differential Connellsville over Pittsburgh was attacked as unreasonable, no issue being raised under Section 3 except as to destination relationship Lockport and Buffalo. A large amount of reparation was also sought. The complaint in that case attacked only rates from points in Pennsylvania. With regard to that feature the Commission said at page 391:

"In this case, as well as 12560, the complaint as to rates from the Connellsville district is limited to that portion of the district located in Pennsylvania. Our finding will be so limited, not because we think a distinction should be made between the northern and southern portions of the Connellsville district but merely because the rates (1495) from the portion in West Virginia are not in issue."

To Buffalo, the Fairmont group mines on the B. & O., except Fairmont No. 1, take differentials over the Monongahela Railway mines. Apparently, owing to the existence of mines in Fairmont No. 1 that are joint to the B. & O. [fol. 1773] and the Monongahela, rates from that group

are kept on a parity with the Monongahela Railway mines.

I am reminded that witness Boden has traced the lines of the Pennsylvania and Pittsburgh & Lake Erie Railroads from Pittsburgh to Cleveland and has shown that for a large part of the distance they comprise practically river-level routes. The Monongahela River flows northward from Fairmont to the confluence with the Allegheny River at Pittsburgh, forming the Ohio River. The Monongahela Railway hugs the west bank of the Monongahela River from Fairmont to a point near Poland, Pa., where it crosses the river and follows the east bank to Brownsville Junction. From Brownsville Junction the Pittsburgh & Lake Erie and Pennsylvania follow the river on opposite banks to Pittsburgh. A river-level route is, therefore, afforded for coal moving northbound from off the Monongahela. Coal moving via the B. & O. from Monongahela Railway points in West Virginia is moved south through (1496) Rivesville. That route is perhaps somewhat more difficult than the northbound route in connection with the P. & L. E. and P. R. R.

As I shall later show, however, there is relatively small percentage of the coal that moves via this latter route. By that latter route I mean the B. & O., rather than the P. & L. E. and P. R. R. The route of the B. & O. from [fol. 1774] Rivesville has already been discussed by witnesses Hewes and Boden.

I have prepared an exhibit showing the operating ratio of various lines handling coal from the various producing districts involved in this proceeding. I desire to introduce as my Exhibit 224, a statement compiled from the Statistics of Railways in the United States issued by the Interstate Commerce Commission, showing the operating ratio of these various lines for the years 1924, 1926, 1928 and 1930. It will be observed that the Monongahela has a very much more favorable operating ratio than any of the other lines.

(Exhibit 224. Witness Petersen, received in evidence.)

The operating ratio figures for these roads for the year 1923 are: Monongahela 48.72%, Montour 65.47, Bessemer & Lake Erie 76.02, Pittsburgh & West Virginia 77.39, B. & O. 75.7, Pittsburgh & Lake Erie 87.0, Pennsylvania 78.7 and (1497) Wheeling and Lake Erie 79.67. I got

those 1930 figures from the Bureau of Statistics of the Commission.

I am reminded that witness Boden introduced certain exhibits showing compilations made from exhibits introduced in the 1930 Lake Cargo Cases and based on studies made by operating officials of lines there and here defendant; [fol. 1775] and also by Mr. Ackerman. I have prepared from the same sources similar compilations embracing the Monongahela Railway and other lines transporting coal from points on the Monongahela Railway and other lines transporting coal from points on the Monongahela. I desire to introduce as my next exhibit, No. 225, certain of these compilations.

(Exhibit 225, Witness Petersen, received in evidence.)

All of the figures used in this exhibit are taken from exhibits introduced by defendants in the Lake Cargo cases; none of Mr. Ackerman's figures have been used therein. This exhibit portrays the tractive effort expended in hauling coal from Maidsville, W. Va., that being an assembly point for northbound coal from off the Monongahela Railway in West Virginia to Cleveland and Ashtabula (1498), Ohio, expressed in terms of pounds of tractive effort required to haul one gross ton one mile and gross ton miles per 1,000 tractive pound hours.

Sheet 1 covers the route of the Monongahela Railway and Pennsylvania Railroad to Cleveland. It will be observed that there are two complications on this sheet indicated by the respective symbols A and B on the lefthand margin. In the first of these all trains included in the Monongahela Railway study as shown on sheet 3 of the exhibit are included.

[fol. 1776] By reference to sheet 3 it will be observed that it took 10 hours to make the run of 41 miles from Maidsville to Brownsville in connection with the second train on April 17th and that it took 12 hours to make the run of the first train on July 17th. Comparison of the running time for these two trains with the time consumed in handling other trains shown in the study indicates that there were abnormal delays in the handling of these trains and that they are not representative of normal conditions on this road. We have accordingly in the second compilation on this sheet, marked B, eliminated these two trains.

Sheet 2 sets forth data similar to that shown on Sheet 1, but using the route of the Monongahela Railway, P. & L. E. and New York Central to Ashtabula. Explanation of the various reference letters used on sheets 1 and 2 are shown (1499) at the bottom of this sheet. In connection with the second sheet of this exhibit I want to call attention to Witness Boden's Exhibit 101. Sheet 2 of his exhibit, which is compiled from certain studies made by Mr. Ackerman in the Lake Cargo cases, indicates that it requires 9.95 pounds of tractive effort to haul one gross ton one mile from assembling points on the P. & L. E. in the Pittsburgh District to Cleveland via the route of the P. & L. E. and Erie. Witness Ackerman's Exhibit 433 in the Lake Cargo [fol. 1777] cases shows the same figure for Ashtabula and Cleveland combined, which, to the extent that his studies may afford a test, indicates that there is practically no difference in comparative tractive expenditure to Ashtabula and Cleveland. The railroads, so far as I have been able to ascertain, put in no figures in the Lake Cargo cases covering the route embracing the P. & L. E. and Erie to Cleveland, so we have been unable to make a compilation based on their figures for that route. I believe, however, that the figure of 14.81 shown on sheet 2 of my Exhibit 225 to Ashtabula also would be representative of Cleveland.

(1499-1500) (It was objected that the witness has not shown any qualifications to testify to operating conditions, and is not qualified to express that conclusion. Objection overruled, and an exception noted.)

(1501) I want further to call attention to the fact that according to Witness O'Toole's study submitted in the Lake Cargo cases (his Exhibit 291) the average tractive effort required to haul one gross ton one mile over the route of the P. & L. E. and New York Central from the Pittsburgh district to Ashtabula is 15.08 pounds, and that is the figure to be compared with the corresponding figure of 14.81 on sheet 2 of my exhibit. According to Mr. Ackerman's Exhibit 424 in the Lake Cargo cases the tractive effort re- [fol. 1778] quired to haul one gross ton one mile from Monongahela Railway points via the Monongahela Railway, P. & L. E. and Erie to Cleveland and New York Central to Ashtabula is 9.98 pounds, and that is the figure to be compared with the figure shown in Mr. Boden's Exhibit 101,

sheet 2, of 9.95 Pittsburgh district to Cleveland via P. & L. E. and Erie.

On sheet 2 of Mr. Boden's Exhibit 101, is shown a figure of 16.59, this being the average pounds of tractive effort required to haul one gross ton one mile from Pennsylvania Railroad points in the Pittsburgh district to Cleveland. This figure is derived from breaking down the figures shown in Mr. Ackerman's Exhibit 432 from the Pittsburgh district via P. R. R. to Ashtabula, Cleveland and Erie, the corresponding (1502) figure for the three ports indicated being 18.36. This, coupled with what I have previously pointed out as to Cleveland and Ashtabula, indicates that, according to Mr. Ackerman's studies, more severe operating conditions are encountered on the route of the P. R. R. to Erie than to Cleveland and Ashtabula. Mr. Ackerman's Exhibit 431 in the Lake Cargo cases shows a tractive effort of 17.4 pounds from the Monongahela Railway mines via [fol. 1779] the P. R. R. to Ashtabula, Cleveland and Erie as contrasted with 18.36 pounds indicated above to these ports via the P. R. R. from the Pittsburgh district.

As coal from off the Monongahela Railway is hauled over the same route of the P. R. R. north of Conway, Pa., to Cleveland as coal from the Pittsburgh district and as differences in local conditions within the Monongahela Railway district and the Pittsburgh district are reflected in the figures indicated to the three ports, I think it fair to conclude that if it requires approximately one pound less tractive effort per gross ton mile to haul coal from the Monongahela Railway mines than from the Pittsburgh district mines to the three ports, it similarly requires less tractive effort to haul coal from the Monongahela Railway district to Cleveland than from the Pittsburgh district to Cleveland.

Mr. Ackerman's Exhibit 425 in the Lake Cargo cases sets forth a tractive effort of 17.04 pounds per gross ton mile (1503) from the B. & O. mines in the Pittsburgh district to the Lorain and Fairport and his Exhibits 76 and 112 a tractive effort of 1806 pounds from the Monongahela Railway mines via the B. & O. to the same ports. From Fairmont district on the B. & O. to the same ports the figure is 19.27 pounds as shown by Mr. Ackerman's exhibits 75 and 111.

[fol. 1780] (1509) The Baltimore & Ohio Railroad put in

certain tractive effort studies covering the movement of coal from the Pittsburgh and Connellsville districts, and its Fairmont district to the ports of Fairport and Lorain in the Lake Cargo Case. The exhibit covering that data is exhibit No. 299 in the Lake Cargo Cases.

(1510) I have not shown any tractive effort figures from the Connellsville district separately from the Pittsburgh group, because the exhibits presented in the Lake Cargo Case indicate that the Connellsville group mines were combined with Pittsburgh group mines in the studies made by the carriers. For example, (1511) Witness O'Toole's Exhibit 292 in that case includes coal assembled at Dickerson Run, which is in the Connellsville group, so far as this case is concerned. In Mr. Triem's Exhibit 258 the farthest assembling point shown from the ports are Youngwood and Shire Oaks and those I understand from Mr. Triem's testimony in the present case (Record page 429) are the assembling points for coal originating in the Connellsville district. It also appears from examination of Witness Boughner's Exhibit 299 in the Lake Cargo Cases that the figures submitted by the B. & O. covering the Pittsburgh [fol. 1781] district included mines on the Baltimore & Ohio in the Connellsville district. My next Exhibit is No. 226. The first five and part of the sixth sheet show distances from tariff origins in the various rate groups served by the B. & O. in the northern West Virginia are as depicted on my Exhibit 126, introduced at Columbus, to Bellaire, Ohio, via Federal Junction and Brooklyn Junction.

Witness Hewes testified at the Columbus hearing that all coke coal from the northern West Virginia groups is handled via Brooklyn Junction. In many instances the short route distances figure via Federal Junction and where that is the case I have shown the distance through Federal Junction.

(1512) If you will notice the exhibit, under the heading "Via Federal Junction" on Sheet 1 you will find "Fairmont" in parentheses. It is in the Fairmont district. It is close to Fairmont. Brooklyn Junction is New Martinsville. Both Fairmont and New Martinsville are shown on my map, Exhibit 126.

Where blanks appear under the columns headed Federal Junction the short route distance is via Brooklyn Junction. Sheet 6 of the exhibit shows distances from the Opekiska

group and Cheat Haven and Bruceton Branch points to Bellaire, Ohio, via Federal Junction, Brooklyn Junction [fol. 1782] and to Glenwood Junction. I have included Glenwood Junction because some of the short route distances figure through that point.

The Opekiska district does not appear on my Exhibit 126, but its location was stated in my oral testimony. The Cheat Haven and Bruceton Branch extends from a point on the B. & O. in the Connellsville district just south of Smithfield, Pa., down into West Virginia. The distances shown on this exhibit are used in exhibits to follow in making up through mileages.

The authority for all the mileages is the B. & O. Official Mileage Table. I have not the number, but I think it has been referred to (1513).

(Exhibit 226, Witness Petersen, received in evidence.)

My next exhibit, No. 227, is similar to the exhibit just discussed, except active mines are used. In the middle column are shown the letters A and B. These letters, as shown on Sheet 4, indicate the periods used in determining active mines; those marked A shown as active in Kern's Exhibit 162 in Dockets 23240 and 23241, are those marked B, being active during the period covered by Mr. Kern's Exhibit 39 in the present proceedings. It will be observed that there were no active mines in the Upshur, Roaring Creek or Junior Districts during the period covered by [fol. 1783] Mr. Kern's Exhibit 39, and the assumption is there are none today.

In computing the distances from these various mines, on this exhibit, *on this exhibit*, I computed the distance from the location station as indicated in the second column of the exhibit. In no cases are the distances shown from the mine tipple itself in the tariffs.

(Exhibit 227, Witness Petersen, received in evidence.)

My next exhibit, No. 228, shows first the number of tariff origins and the number of active mines in each of the origin districts in northern West Virginia; second, the total distance from all tariff origins and active mines in each of the origin (1514) districts to Bellaire, Ohia, via the shortest B. & O. route and via Brooklyn Junction; and, third, the average distance from all tariff origins and active mines in

each of the origin districts to Bellaire, Ohio, via the shortest Baltimore & Ohio route and via Brooklyn Junction.

On Sheet 2 is shown the totals and averages for all origin districts. There is also shown on Sheet 2 the total and average distances from each of the origin districts and from all origin districts to Glenwood Junction, Pa. The Glenwood Junction distances are used to determine the [fol. 1784] short route distances to Youngstown, Ohio, as set forth in a subsequent exhibit from all origin districts and to certain destinations from certain points in the Opekiska and C. H. & B. districts. From all other groups indicated on the exhibit to all destinations the short route distances figure via either Brooklyn Junction or Federal Junction.

There is what might be called a void in my exhibits, at this point, in that I have not compiled the supplementing distances from Bellaire and Glenwood Junction to the destinations covered by this exhibit so that if anyone wanted to check the through distances as shown in my Exhibit 228 to show what route had been used they would be unable to do so. The figures shown in 228 should be supported by figures showing the distances beyond Bellaire and Glenwood Junction to the northeastern Ohio destination points.

(1515) Mr. Kern's Exhibit 39, Sheet 27, shows the distance from Bellaire, Ohio, to Cleveland, via the B. & O. to be 149.3 miles. The correct distance is 159.3 miles, but that was merely a typographical error for the figures appearing in the last two columns indicate that using the correct figure of 159.3 miles to arrive at his total through dis- [fol. 1785] tance and his average distance.

(1516) (Exhibit 228, Witness Petersen, received in evidence.)

My next exhibit, No. 229, shows the through mileages from the various groups served by the B. & O. in northern West Virginia to Cleveland via the shortest B. & O. route and via Brooklyn Junction, as indicated by the symbols A and B. The Baltimore & Ohio does not publish rates in connection with other lines to Cleveland.

(Exhibit 229, Witness Petersen, received in evidence.)

My next exhibit, No. 230, shows the same in formation to Lorain, Ohio. Here also rates apply via the Baltimore & Ohio, direct. There is also a route, Baltimore & Ohio to Elyria, thence New York Central, but the distance is only about one mile farther than the route of the B. & O., direct.

(Exhibit 230, Witness Petersen, received in evidence.)

My next exhibit, No. 231, is similar to the two preceding exhibits, and covers Canton as a destination point, via the B. & O., direct.

(Exhibit 231, Witness Petersen, received in evidence.)

My next exhibit, No 232, sets forth data similar to exhibit No. 231, except routes via the Baltimore & Ohio, and Wheeling & Lake Erie, are used.

[fol. 1786] (1517) In these exhibits that I am now talking about, I show Junior as one of the originating points, as being on the Baltimore & Ohio. That is incorrect; it is the Western Maryland. The only mines in the Junior District are on the Western Maryland Railroad, and all routes apply from the Western Maryland Railroad points through Belington and the B. & O.

[fol. 1787] In my exhibit I show these routes via B. & O. direct, and show Route A or Route B. B. & O. direct, is the tariff route.

(Exhibit 232, Witness Peterson, received in evidence.)

The next four exhibits are similar to the last four exhibits and cover Akron, Massillon, Mansfield and Youngstown via the B. & O. There are no other routes open.

(Exhibits 233, 234, 235 and 236, Witness Petersen, received in evidence.)

My next exhibit, No. 237, is a correction of my exhibit 128, introduced at the Columbus hearing. In preparing exhibit 128, I overlooked (1518) the route to Canton, Ohio, embracing the Baltimore & Ohio and Wheeling and Lake Erie. In the present exhibit, I have included that route.

The term "distances from Monongahela Railway mines" in the heading are the short tariff distances from individual mines to the junction points shown.

(Exhibit 237, Witness Petersen, received in evidence.)

My next exhibit, No. 238, is the same Exhibit as 237 except that the route of the Baltimore & Ohio through Brooklyn Junction is used instead of the short route of the B. & O.

(Exhibit 238, Witness Petersen, received in evidence.)

My next exhibit, No. 239, contains information similar to that shown in the two exhibits next preceding, except that [fol. 1788] Youngstown, Ohio, is the destination point. In the first bracket I show the short route distances to Youngstown. In the second bracket I show the route via Brooklyn Junction.

(Exhibit 239, Witness Petersen, received in evidence.)

(1519) Next is an exhibit, No. 240, showing existing rates from Monongahela Railway mines in West Virginia to destinations in Northeastern Ohio.

(Exhibit 240, Witness Petersen, received in evidence.)

My next exhibit is No. 241. Sheet 1 shows rates and tariff routes from Pittsburgh and Connellsville districts to Youngstown, Ohio. Mr. Kern in his exhibits does not show through distances to Youngstown or show data from which such distances can be computed. He does, however, show in his exhibit No. 39, mileages to the various junctions shown on Sheet 2 of my present exhibit. The distances from the various junctions as shown on Sheet 2 of this exhibit, coupled with the distances to the junction points shown in Mr. Kern's Exhibit 39, will afford a means of determining the through mileages to Youngstown.

(Exhibit 241, Witness Petersen, received in evidence.)

My next exhibit, No. 242, shows rates and distances from points on the Western Maryland Railway in northern West Virginia, designated in the Western Maryland tariffs as [fol. 1789] their Fairmont district. The section of the Western Maryland upon which the mines covered by this exhibit are located is not connected with the remainder of that railroad, but I understand the Western Maryland has trackage rights or some operating agreement with the B. & O. under which coal from these mines is handled north over the Baltimore & Ohio to the (1520) connection of the

Baltimore & Ohio and the Western Maryland at Bowest Junction. All of the routes shown on the exhibit, and all existing routes are shown, to all destination points set forth therein are via Bowest Junction or Connellsville, except that to Massillon and Mansfield the routes in connection with the B. & O. are via Brooklyn Junction or Federal Junction, whichever is shorter.

(Exhibit 242, Witness Petersen, received in evidence.)

My next exhibit, No. 243, shows rates and milages from mines on the Monongahela Railway in West Virginia compared with rates and mileages from mines in the Connellsville district on the Monongahela Railway and Baltimore & Ohio Railroad. I have designated the mines on the Monongahela in West Virginia as the Fairmont No. 2 District only for convenience. They are so designated in the B. & O. tariff but they are not so designated in the P. R. R. and P. & L. E. Tariffs. These are three routes shown to each destination, these being respectively the shortest routes embracing [fol. 1790] the P. & L. E., P. R. R. and Baltimore & Ohio.

(Exhibit 243, Witness Petersen, received in evidence.)

This exhibit is not intended to be a complete presentation of mileages from the Connellsville district as mileages from mines on the Pittsburgh & Lake Erie and Pennsylvania Railroad are somewhat shorter and are shown in Mr. Kern's Exhibit 39. It is presented to show the slight difference between the (1521) average short route distances embracing the three lines having direct connection with the Monongahela Railway from mines on the Monongahela in West Virginia and mines taking the Connellsville rate on the Monongahela in Pennsylvania and on the B. & O.

To Cleveland it will be observed the short route distance from mines on the Monongahela in West Virginia is 234.7 miles, whereas the short route distance from mines on the B. & O. in the Connellsville district is 242.8 miles, but the mines in West Virginia are at a rate disadvantage of 9 cents. The average short route distance from the mines on the Monongahela in West Virginia is 242.8 miles, whereas the short route distance from the mines on the B. & O. in the Connellsville district is 242.2 miles, a difference of but six-tenths of a mile.

Cleveland is the most important consuming point in northeastern Ohio for coal from commercial mines. Akron is [fol. 1791] another very important consuming point, and it will be observed that the average short route distance from mines on the Monongahela is but 14.5 miles greater than from mines on the B. & O. in the Connellsville district, but that the rate disadvantage of the former is 9 cents.

By referring to Exhibit 233, it will be observed that from groups served by the B. & O. in the Fairmont District a rate of $1.82 applies to Akron, or five cents less than from mines on the Monongahela Railway in West Virginia. The average short (1522) route distance from certain of these B. & O. Groups is farther than from the Monongahela Railway mines in West Virginia. For example, the average short route distance from presently active mines in the Bellington-group is 252.3 miles, as contrasted with a similarly computed distance of 218.1 miles from the Monongahela mines in West Virginia, and an average short routes distance from the latter mines of 223.5 miles.

Many other comparisons showing that the Monongahela Railway mines are not under the present adjustment given the benefit of their location may be drawn from my exhibits coupled with Mr. Kern's exhibits.

[fol. 1792] I am asked for the figures to support my assertion that the movement of coal from off the Monongahela Railway was preponderantly northbound. The Monongahela Railway is owned jointly by the Pennsylvania, Pittsburgh & Lake Erie and Baltimore and Ohio Railroads. I have secured from the Monongahela Railway the tonnages moving from points on that road for the 11 months ended November 30, 1932. These show that 7,732,000 tons moved via Brownsville Junction, 348,005 tons via Leckrone and 497,908 tons via Rivesville. The figures, of course, cover all coal from Monongahela Railway points.

(1523) I have checked the distances shown in Mr. Kern's Exhibit 39 from the Connellsville district. While there are some errors from individual points, these do not affect the averages he shows to any material extent. There is one error I desire to point out however and that is the distance from Point Marion to Newcastle Junction. He shows 138.9 miles. The correct distance is 145.1 miles.

I am reminded that Dr. Rietell has placed in the record fig-

ures showing the falling off of coal production in Pennsylvania over a period of years. I have not had an opportunity to prepare figures that are exactly comparable, showing the falling off of production on the Monongahela Railway, but I have figures covering commercial coal shipped from points on the Monongahela Railway which show a decided drop [fol. 1793] since 1927. The high point of commercial tonnage shipped from Monongahela Railway points was in 1927 when 17,882,000 tons were shipped; in 1928 the tonnage was 17,698,500 tons; in 1929, 17,740,000 tons; in 1930, 15,414,000 tons; in 1931, 12,072,000 tons; and for the first 11 months of 1932, 8,577,983. In 1927 there were 141 mines operating on the Monongahela. On July 1, 1932, there were 41.

(1524) I use the term "commercial tonnage" as distinguished from captive tonnage. When I give the figure of the high point of commercial tonnage shipped from Monongahela Railway mines, that figure denotes revenue coal as distinguished from dead-head coal. It does not include captive.

In his exhibit 215 Mr. McCort sets forth certain traffic statistics for 1930 covering lines operating in Ohio. I have prepared similar statistics covering the Monongahela, Montour and Pittsburgh & Lake Erie Railroad. I have secured these statistics from Statistics of Railways in the United States, issued by the Interstate Commerce Commission.

The figures are: (1) Average revenue ton miles per mile of road operated, Monongahela, 3,106,858; P. & L. E., 9,240,501; Montour, 2,490,732; (2) Average revenue ton miles per freight train mile, Monongahela, 1,474.11; P. & L. E., 1,644.50; Montour, 707.38; (3) Average revenue ton [fol. 1794] mies per loaded freight car mile, Monongahela, 54.36; P. & L. E., 45.13, Montour, (1525) 51.56. Mr. Boden, in his Exhibit 100, shows a slightly different figure for the Pittsburgh & Lake Erie per mile of road operated, but a check of his figures indicates that he has used all freight rather than revenue freight.

The reference throughout exhibit 228 to the shortest route should be the shortest B. & O. route. There is no route except the B. & O. route from these groups to Bellaire.

Cross-examination.

By Mr. Webber:

(1526) I understand Mr. Hewes testified in this case that the route from the Monongahela Railway mines in West Virginia to Cleveland is through Rivesville and the B. & O. via Brooklyn Junction. When I made the comparison between the route in connection with the B. & O. and routes through Brownsville, I show it both ways—via the route I have just described and the shortest B. & O. route. I had in mind the route over which the coal actually moved to Cleveland via the B. & O., as well as the shortest route.

I intended my characterization of the route as being more difficult than the routes through Brownsville as applying to the route over which the coal actually moves; but I also believe that the shortest B. & O. route is also more difficult than the route of the P. & L. E. and P. R. R. through Brownsville. I base that statement (1527) on the evidence concerning the operating condition, etc., that has been introduced here. I believe Mr. Hewes testified with regard to the route over [fol. 1795] which the coal actually moved. I draw my conclusions partly from what Mr. Hewes said.

I am asked to refer to any statement that Witness Hewes made that would indicate that the route over which the coal moved via the Baltimore & Ohio to Cleveland is more difficult than the route through Brownsville. He described the route in general. In the first place, it is a good deal longer. Then the other evidence submitted concerning tractive effort studies and other matters of that kind show the B. & O. route to be more difficult. I recall that he described the movement in through trains from Rivesville, from the assembly point to Cleveland. I do not know whether he indicated that in his opinion it was a very easy operation or not.

(1528) I am reminded that on my Exhibit No. 239, I show Baltimore & Ohio via Brooklyn Junction with Youngstown as the destination. I am asked whether I know of any coal moving from Rivesville to Youngstown through Brooklyn Junction. I do not believe that Mr. Hewes covered Youngstown when he testified as to the movement through Brooklyn Junction. I do not believe that the movement is through Brooklyn Junction. That Junction is on the line with the

B. & O., I believe, called River Division, some distance below Wheeling.

I said I do not believe that the coal moves that way from Rivesville to Youngstown, but I was not certain of it, and Mr. Hewes testified that the Cleveland coal moves that way so I put it in here to have available figures.

[fol. 1796] (1529) Assuming that the route of movement is through a point other than Brooklyn—I do not know that it is—it would be fair to say that the mileages I have shown for B. & O. and the Brooklyn Junction are much greater than the mileages would be through the route of movement and through the proper junction.

By Mr. Gutheim:

On my Exhibit 224, the operating ratios shown are for total operations.

(1530) I am asked whether I know whether the operations of the Monongahela Railroad are generally similar to the operations, for example, of the P. & L. E. and the Pennsylvania Railroad. I do not think the Monongahela Railroad owns any great number of cars. I do not know whether it owns any interchange car equipment. I do not know how the ownership or non-ownership of interchange freight cars affects a carrier's operating ratio. I know that the Monongahela, of course, pays a considerable amount of car rental. I do not know whether that expense of car rental goes into operating expenses.

I do not know whether the Montour owns any interchange equipment, or whether the item of freight car ownership is the same on the Montour as it is on the Monongahela.

(1531) On my Exhibit 225 the coal of the Monongahela Railway origin moving via the Pennsylvania's route to Cleveland, goes through both Brownsville Junction and [fol. 1797] Shire Oaks. I traced these routes out on the map to find out whether the Monongahela Railroad coal, going via the P. R. R. route to Cleveland, goes first through Brownsville Junction, then through Shire Oaks, and then through Conway. The coal so moves through each of those junctions. I do not see any other junction through which they might move.

This Exhibit 225, does not show any computation of the locomotive tractive effort expenditure in moving coal off

the Monongahela Railway and via the B. & O. to any destinations. As to whether coal does so move from the Monongahela Railway mines via (1532) routes on the Baltimore & Ohio to destinations here involved, a small percentage of it does.

The point of origin on the Monongahela from which I have computed the tractive effort expenditure down to Brownsville Junction is Maidsville, which is some distance south of Brownsville Junction. I do not recall exactly how far.

Maidsville is 38.6 miles south of Brownsville Junction. It is in West Virginia. I do not know how far that would bring it into West Virginia.

(1533) Maidsville is the assembling point for the coal of the complainants that I speak for here. The coal is assem- [fol. 1798] bled from points principally south of Maidsville—I believe the entire distance of the Monongahela Railway south of Maidsville. That takes the main river route right up to Fairmont. I believe it also takes in all the branches.

Five mines are represented by the complainants for which I speak, that is, the Continental Coal and the New England Fuel & Transportation.

(1534) Federal No. 1 is at Grant Town, on the Paw Paw Branch. I am taking this from Mr. Kern's Exhibit 39. I think it is set out in one of mine also, introduced at Columbus—125 or 127, something like that. Federal No. 3 is just off the main line at Lowsville. I believe it is on the Indian Creek Branch, but it is within a (1535) mile or two of the main line. Brock No. 4 is at Cassville, which is on the Scotts Run Branch. Brock Nos. 3 and 5 are at Rivesville, but I think they are just off the main line on the Paw Paw Branch.

I am also speaking here for a number of intervenors. I have not the information here as to how many mines are represented by them. I cannot say whether their mines are mostly on the branch lines or not.

I do not know whether these branches of the Monongahela are river level lines like the main lines, or not.

[fol. 1799] (1536) I do not know whether the one line on the Scotts Run Branch, of ours, involves grades as high as 3 per cent, or whether it involves curvature running as high as 16 to 20 per cent.

This Exhibit 225 is supposed to present studies of the expenditure of tractive effort in the actual movement of trains as the same are included in the carrier's 5-day train studies. It is the study of the locomotive tractive expenditure incident to the movement of all of the commodities in all those trains.

On the Monongahela Railroad bituminous coal comprises about 95 per cent of the tonnage. None of the other railroads involved in these through rates, with the exception of the Montour, have percentages of bituminous coal traffic to all traffic very close to 95 per cent.. (1537) The B. & L. E. is over 70 per cent bituminous coal. The Pittsburgh & West Virginia is about 65 per cent. The Monongahela is over 95 per cent. The B. & O. is a little less than 50 per cent, and the P. R. R. is a little less than that.

[fol. 1800] I am asked whether on my Exhibit 226, there are any of these routes to Bellaire taken by me in my exhibit showing studies of locomotive tractive effort expenditure. I believe that Brooklyn Junction route is in there to Lorain, in the figure that I read. It is in the figure (1538) that I read into the record which was taken from Mr. Boughner's exhibit in the Lake Cargo Cases.

Referring to this Exhibit 226 (1539), I am asked to state the entire route by which our coal moves, and in which you hit Glenwood Junction on the B. & O. That includes only points on the B. & O. or districts on the B. & O. in the groups below the Monongahela Railway mines. To Bellaire, there is no route shown on the exhibit through Glenwood Junction.. There is no distance here from any of these points to Bellaire via Glenwood Junction.

(1540) I am asked to explain the significance of the statement in the heading, "Distance from B. & O. Tariff Origins in Northern West Virginia to Bellaire, Ohio, and Glenwood Junction, Penna." I thought I explained that before. To Bellaire, Ohio, we show the distances from all the groups, using Bellaire as the clearing point. Now, we also show distances from the Opekiska District at the C. H. & B. Branch to Glenwood Junction, as well as Bellaire, because certain of the through distances are made through Glenwood Junction rather than Bellaire.

[fol. 1801] It is two distinct groups. The movement from these mines to Bellaire does not involve us in a movement through Glenwood Junction, nor does the movement

through Glenwood Junction involve us in a movement to Bellaire.

(1541) Exhibit 229 covers B. & O. origin groups only. The complaint in this case assails the rates from Monongahela Railway mines only. We are not asking for any relief except from the Monongahela Railway mines. The interveners who are supporting our complaint are located on the Monongahela Railway.

(1542) This Exhibit 229 does not cover any Monongahela Railway origin districts.

As to whether the Monongahela Railway operates within the confines of any of these districts, there are joint mines, that is, joint Monongahela-B. & O. mines, in Fairmont District No. 1. There are no Monongahela Railway mines in Monongah, nor Opekiska, nor on the Cheat Haven & Bruceton. There are none in the short line group, nor in Clarksburg, Belington, Upshur, Roaring Creek, or Junior.

(1543) Referring to Exhibit 233, it does not show any tractive effort studies covering movement from B. & O. mines in Northern West Virginia to Akron, nor to any of the other destinations which I show in my whole series of exhibits.

[fol. 1802] On my exhibit 240, the rates are all the same to Cleveland from Monongahela Railway mines in West Virginia as apply from the other Fairmont District mines to Cleveland.

(1544) To Canton, via the B. & O. direct, the rate from Fairmont No. 1, Monongah, Opekiska, Short Line, Clarksburg, Belington, Upshur, Roaring Creek and Junior is $1.82. From the C. H. & B. branch it is $1.75. From Monongahela Railway mines in West Virginia it is $1.84.

The rate from all of the B. & O. origin districts to Akron is $1.82. From Monongahela Railway mines in West Virginia it is $1.87.

To Massillon the rate from Fairmont No. 1, Monongah, Opekiska, C. H. & B., Short Line and Clarksburg is $1.65. From Belington, Upshur, Roaring Creek and Junior it is $1.77. From Monongahela Railway mines in West Virginia it is $1.87.

(1545) To Mansfield the rate from Fairmont No. 1, Monongah, Opekiska, Short Line, Clarksburg, Belington, Upshur, Roaring Creek and Junior is $2.03. From the C. H. & B. it is $2.09 and from Monongahela Railway mines in West Virginia it is $2.13.

At Lorain, it is the same as Cleveland.

To Youngstown the rate to Fairmont No. 1 and Opekiska [fol. 1803] is $1.58. The rate from the C. H. & B. is $1.52. The rate from Monongah, Short Line, Clarksburg, Belington, Upshur, Roaring Creek and Junior is $1.64, and the rate from Monongahela Railway mines in West Virginia is $1.58.

On my Exhibit 242, the Western Maryland mines are located on a detached branch and are reached by the Western Maryland through trackage rights or some operating arrangement over the B. & O. from Connellsville.

As to whether there is any difference in mileage against the Monongahela Railway mines as compared with the balance of the Westmoreland District to eastern destinations, (1546) I did not check that out particularly. I believe, however, that the Monongahela mines are well within the district.

Redirect examination.

By Mr. Keeler:

(1547) All the coal on the Scotts Run Branch—that is, the coal that is now being mined—is east of Cassville. The rates on the Scotts Run Branch beyond Cassville are 15 cents a ton higher than the rates from Cassville.

The exhibits I have introduced and the investigation I have made indicate that there is no production on the [fol. 1804] Scotts Run Branch beyond Cassville. (1548). Cassville is 4.4 miles from the main line. From Cassville to the main line there is a stream known as the Scotts Run branch, and the line follows the Scotts Run Branch stream up to the main line of the Monongahela Railway.

The Indian Creek branch is 3.1 miles long, and the Monongahela follows the Indian Creek branch to the main line.

The Monongahela Railway follows Paw Paw Creek from Grant Town down to the connection with the main line of the Monongahela Railway. Paw Paw Creek runs into the Monongahela River.

The fact that on all these branches the Monongahela follows the streams that flow into the Monongahela River at their (1549) connection with the Monongahela Railway, does not indicate to my mind that there are any excessive

grades in connection with the movement of the loaded cars to the main line of the Monongahela. I do not know what the situation may be out beyond Cassville on the Scotts Run Branch.

I have examined Mr. Ackerman's tractive effort studies, as to whether the figure he presented for the Monongahela Railway covered the entire operations of the Monongahela Railway. I believe he took in the Monongahela Railway from Fairmont, which is the end of the line.

[fol. 1805] Recross-examination.

By Mr. Gutheim:

The Monongahela Railway follows the river bed—the bank of the river. (1550) The downward flow, of course, is in the direction of the loaded movement of the coal in these particular cases; to that extent on all the branches of the Monongahela Railway there is no hauling of the coal against the grade.

At this point, Mr. Bull submitted the following corrections: On Exhibit 95, sheet 2, showing the distances to Lorain, the eighth route from Fairmont is the route of the P. & L. E., N. Y. C. Junction, N. Y. C., Cleveland and N. Y. C. & St. L. The total mileage should be 987.8 instead of 1,037.8. That would make the average distance 290.5 miles instead of 305 miles, and would change the ton mile earnings (1551) to 6.85. The total at the bottom of that sheet would be 157,084.02; the average distance, 267.6, and the ton mile earnings 7.43.

The next correction is on sheet 4 of Exhibit 95. In the fourth route for Fairmont, that is B. & O. Justus, Wheeling & Lake Erie, the average should be 905.9 instead of 905.0.

For the sixth route, which is P. & L. E., Youngstown, Erie, Kent & W. L. E., the total mileage is 8334.2; the [fol. 1806] average distance 245.1 miles, instead of 230.4 miles, and the rate per ton per mile 7.51, instead of 7.99.

The total on the first line, instead of 96,684.8, should be 97,193.8, the average distance 218.9, and in the next to the last line on that sheet the total should be 39,715.4, the average distance 218.2, instead of 215.4, and the rate per ton per mile 8.43, instead of 8.54.

(At this point Mr. Bronson, at the request of Mr. Ballard, stated for the record the position of the Pittsburgh & West Virginia in the 13th Section case, as follows: (1554) "I am here primarily to justify, in I. & S. 3801, the $1.55 rate, which we were permitted to put in by order of the Commission vacating the suspension order but continuing the investigation. I have that burden upon me. I am taking the position that, if not a reasonable maximum rate from our mines in the Pittsburgh District, it is, nevertheless, above the level of a reasonable minimum rate. We are not undertaking to say that $1.55 or $1.45 from the Ohio No. 8 fields is a reasonable maximum rate. I understand that the position of the eastern carriers, the trunk line carriers, is that it is less than a reasonable max-[fol. 1807] imum rate (1555) and is a rate which unduly burdens interstate commerce, because unreasonably low. I am not taking that position.").

[fol. 1808] R. M. Paisley was called as a witness, and having been duly sworn, testified as follows:

Direct examination.

By Mr. Bronson:

(1557) The Pittsburgh & West Virginia is a respondent in Docket No. 25566. I am asked what I have to say with respect to our reduced $1.45 rate from our Ohio No. 8 mines to Cleveland and Lorain and the $1.55 rate to Huron, involved in this proceeding.

We have but four small mines in the Ohio No. 8 District, which ship but a small tonnage to Cleveland and other northeastern Ohio destinations.

Our Ohio No. 8 mines are the nearest to Cleveland, and our rates cannot be higher than the Wheeling & Lake Erie rates. The average haul from our Ohio No. 8 mines to Cleveland and all other destinations on the Wheeling & Lake Erie and Lorain and West Virginia Railroads is 33 miles less than the average haul from our Pittsburgh District mines; and, as the difference in rate is but 10 cents, all the testimony which I will offer to show that our Pittsburgh District rates are not unduly low, in violation of Sec-

tion 1, will apply with greater force to show that our Ohio No. 8 rates are not unreasonably low.

Mr. Kern's Exhibit No. 33 shows that the average distance from the Ohio No. 8 mines to Cleveland is 159.4 miles, [fol. 1809] and from the Cambridge District 214.4 miles. The distance from (1558) the P. & W. V. Ohio No. 8 mines to Cleveland proper is but 126.9 miles.

As is shown in a statement which I offer as Exhibit No. 244—I haven't that exhibit with me now, but I will furnish it tomorrow—on the I. C. C. Docket 23922 scale our Ohio No. 8 rate would be $1.40 instead of $1.45.

Cross-examination.

By Mr. Ballard:

The $1.40 rate is to Cleveland. Our average distance from our No. 8 district mines to Lorain is 128.9 miles, and (1559) that would make $1.40 on the scale. Our Cleveland distance is 126.9 miles. Both of those would make $1.40. The distance to Huron proper is 139.9 miles. That is $1.45. We publish $1.55. Those are the only destinations to which we publish rates, except points that take the same rate under the intermediate clause. We do not publish any to Canton or Massillon. To Akron, we have only changed the Canton rate to the extent of clearing the Cleveland rate. (1560) Our Lorain rate is $1.45. Our Cleveland rate is $1.45, and our Huron rate is $1.55. The scale to which I have referred is the 23922 scale. In the Republic Case, to measure the rates from District No. 8 [fol. 1810] to Canton and Massillon, the Ohio Commission referred to both the 23922 and 23130 scale. 23130 goes to 130 miles. I do not recall the figures for 130 miles. $1.40 is apparently correct. I believe that scale was made in the Indiana Coal Trade Bureau case as a maximum reasonable scale. (1561) Taking that as a maximum reasonable scale, it shows—measured by that scale—that our rates to Lorain, Cleveland and Huron are above the maximum limit of reasonableness.

(1562) The position of our company in the 13th Section case is that we will do whatever the Interstate Commerce Commission decides is right to do from our No. 8 district, except that we want the same rates from our mines in the

No. 8 district as apply from other mines in the No. 8 district. (1563) If the Commission decides that our rates from the No. 8 district, along with the other Ohio No. 8 districts and Cambridge, and so forth, in Ohio, should be made substantially or on the 23922 basis, producing maximum reasonable rates, that is the rate that we will public-.

As to our position generally on the question of whether our present Ohio rates are maximum reasonable rates, we did not have any chance to decide that. We found out on the telephone that the Wheeling & Lake Erie were down in [fol. 1811] Columbus reducing them. So we got our in as quickly as we could after the fireworks were over. I do not think these rates could be called below maximum reasonable rates—or minimum reasonable rates, I should say. [fol. 1812] (1564) I am asked by Mr. Ballard whether it is the position of our company that our present reduced Ohio rates are less than maximum reasonable rates. (1565) I do not care to answer that question. As I said before, I think that they are higher than minimum reasonable rates.

(1567) Exhibit No. 174 in this case shows the distance from the No. 8 district to Cleveland, computed in accordance with the formula prescribed by the Commission in No. 23922 to be 136.2 miles, and the rate under that scale for that distance to Cleveland, is $1.45. I have said that, so far as that scale is a fair yardstick of reasonableness, it would support the conclusion that the scale rate for that distance of $1.45 would be reasonable.

I am asked what other yardsticks I have in mind as could properly be applied in testing that rate, in addition to the scale. (1568) Well, I suppose you can find the rates that are substantially on that scale and find other rates that are way above that scale in the same general territory. You could take the first point east of Cleveland on the New York Central Railroad, where there (1569) is $1.74 rate and compare that with the $1.45 rate to Cleveland and find that the rate to the first point east of Cleveland is substantially higher.

[fol. 1813] I am asked whether I do not know that all the rates, both state and interstate, in the Indiana-Illinois territory have been fixed by the Interstate Commerce Commission at a maximum reasonable level. I do not know if all of them have been fixed, but I know there were some fixed in

23922, and, as I recall, there were some other cases. (1570) The scales prescribed in dockets 23922 and 23130 and the point-to-point rates prescribed in those two cases are substantially on the same level.

That level applied to the No. 8 rate to Cleveland of $1.45, and I think I said about fifteen minutes ago that that shows it to be a reasonable maximum rate. If I have in mind any other valid yardsticks which show anything different I do not care to reveal them at this time. My testimony relied on the 23922 docket alone.

By Mr. Martin:

(1571) If I stated that we had not published any reduced rates from our Ohio No. 8 mines to Canton and Massillon, that was a mistake. I should have said to Akron. We complied with the order of the Ohio Commission in the Republic case to Canton and Massillon.

Redirect examination.

By Mr. Bronson:

Mr. Kern's Exhibit 33 shows the average distance via all tariff routes to Cleveland from the Cambridge District [fol. 1814] to be 214 miles; and the 23922 scale for that distance *if* $1.85.

From the same Kern exhibit I have computed the Ohio No. (1572) 8 Cambridge combined average distance to be 167.8 miles producing, under the 23922 scale, a rate of $1.65. That is from all tariff origins via all tariff routes.

I am the General Freight Agent of the Pittsburgh & West Virginia Railway. I have been employed in the traffic department of that railway for twenty-three years. I am familiar with the rate structures involved in these proceedings.

Recross-examination.

By Mr. Martin:

(1573) When I computed the figures which I last gave on redirect, I did not use the formula which was prescribed in the 23922 report for the figuring of mileages upon which

the scale should be applied. I testified that I used all tariff origins via all tariff routes. As to the formula prescribed in connection with the scale in 23922, I think the carriers in Indiana are trying to get the Commission to tell them what it is now, and I am not yet informed that the Commission has informed the carriers just what that formula means. So I would not care to put myself up as being an [fol. 1815] expert on that formula.

I have read the report in that case a number of times. (1574) The order in that report provides that the distance from each point of origin shall be computed over the shortest existing tariff route over which joint or single-line rates apply, except that, so long as the present origin groups are maintained without material change, the rates from each group shall be based on the average of the distances over the shortest existing tariff routes over which joint or single-line rates apply from all the mining points in the group. I believe that appears at page 231 of the report. I did not follow that formula in computing the distances which I gave on redirect.

Redirect examination.

By Mr. Bronson:

(1576) I have not computed distances from the Ohio No. 8 and the Cambridge districts on the mileage formula in 23922. The short route shown in Kern's Exhibit 33 from the Ohio No. 8 district to Cleveland is 135.3 miles; from the Cambridge District, 195.3 miles, and the Ohio No. 8 and Cambridge Districts combined is 147.4 miles. On the 23922 scale, the distance from the Ohio No. 8 produces $1.45, from Cambridge $1.75, and from the Ohio No. 8 and [fol. 1816] Cambridge districts combined, $1.55.

Recross-examination.

By Mr. Orcutt:

(1577) Our company did not reduce its rates from our Ohio No. 8 mines to Cleveland until we learned that the Wheeling & Lake Erie was reducing its rates. We felt and still feel and always will feel that our No. 8 district rates should be no higher than the Wheeling & Lake Erie No. 8

district rates. If the Wheeling & Lake Erie had not reduced its rates at that time, our rates would not have been, voluntarily, reduced at that time. We would not, between that time and now, have reduced our Ohio No. 8 rates without the necessity of meeting some other Ohio No. 8 rates.

Our company is not a petitioner in 25566, the 13th Section Case. I would say that our position in the 13th Section Case is a neutral position. (1578) We do not want to be responsible for breaking down any rate fabric, but, at the same time, we are going to step out and do what we can to meet our competition where we find it.

By Mr. M. Carter Hall:

(1578) Our rates from our Ohio mines to Cleveland were reduced on August 12, 1932. The $1.74 rate was effective from July 1, 1922. I do not think that the management, during all those years, even thought about whether that rate was unreasonably high. As I said before, we are not rate cutters, and we take more or less of a neutral position [fol. 1817] and we only do what is necessary when we have to.

(1579) If the Wheeling & Lake Erie had not reduced the rates from the Ohio No. 8 District to Cleveland on August 1st, our rates would not have been reduced on August 12th.

My entire railroad experience has been with the Pittsburgh & West Virginia Railway. That line does not reach the destination territory served by the railroads involved in I. C. C. 23922. We neither serve the origin mines in Indiana nor Illinois, nor do we serve the destination territory involved in that proceeding by our own rails. If we transport any coal there, you would have to find it with a microscope (1509).

(1581) I have not made any investigation of transportation conditions in Indiana and Illinois because I am not a transportation man and it would not mean anything if I did make an investigation. I have not made any investigation of traffic conditions since August 12, 1932, in Illinois. As to whether we ever made any rates in our territory on the basis of rates that were made by other railroads or prescribed by the Commission in Illinois or Indiana, we did on cement, for instance. Of course, 23922

and 23130 are quite young, but about the only rates that have been disturbed as a result of them have been the rates [fol. 1818] we have been discussing. That scale applies all over Central Territory.

By Mr. Day:

As to the principal railroads serving the Indiana fields, I am not familiar with what railroad has the most tonnage on it in Indiana because I have no source for that information.

By Mr. Gutheim:

(1582) I know that the trunk lines have reduced their rates from Ohio as well as the Wheeling & Lake Erie.

[fol. 1819] C. B. ACKERMAN was called as a witness, and having been duly sworn, testified as follows:

Direct examination.

By Mr. Ballard:

(1584) My name is C. B. Ackerman, of Chicago, Illinois. I am a specialist in railroad rate and operating matters and am engaged in general practice in that field. (1585) I have been in general practice in this field since 1924. Prior to that time I had 26 years experience in railroad service, about half of the time in the operating department and the remainder in the traffic departments.

From 1920 to 1924 I was traffic assistant to the Director General of the United States Railroad Administration and had jurisdiction of the territory, roughly speaking, Chicago to the Pacific Coast, although I did have considerable duties in the eastern and southern territories.

Prior to my connection with the United States Railroad Administration I was assistant to the assistant general freight agent, assistant freight traffic manager, and freight traffic manager of the Chicago and North Western at Chicago, Illinois, for a period of approximately 12 years. Prior [fol. 1820] to that time I had considerable experience in the local offices of the Chicago and North Western Railroad at Chicago.

Prior to that time I was connected with the Chicago, Milwaukee & St. Paul Railroad, the Chicago & Eastern Illinois Railroad (1586), the Wabash Railroad, and the Chicago & Great Western Railroad, at Chicago, in the operating and local offices. I also had about two years experience in the operating department of the Southern Pacific Railroad, at Los Angeles, Cal.

In the operating department I was yard clerk and chief yard clerk and road brakeman in brake service over a period of about five years.

As traffic assistant to the Director General of the Railroad Administration, my duties consisted of investigating railroad operating conditions and traffic matters for the purpose of presenting evidence to the Interstate Commerce Commission in defense of complaints assailing rates assessed by the United State Railroad Administration during federal control, and by the carriers prior and subsequent thereto.

Since I have been in private practice I have been in a large number of intrastate coal cases in Illinois, the Illinois 13th Section Case No. 23130; the Indiana Coal Trade Bu- [fol. 1821] reau Case which followed it, No. 23922; the West Kentucky Coal Case which involved rates from western Kentucky to western trunk-line territory; Lake Cargo Coal Cases, 1930, involving lake cargo coal rates from the Appalachian districts to lake ports; the Eastern Bituminous (1587) Coal Case, No. 23430, in which a proposed report was recently issued; the trans-continental deciduous fruit cases; and numerous other cases involving rates on sand, gravel, crushed stone, and other commodities.

In those cases I prepared both traffic and operating testimony.

For presentation in this case, I have prepared rates exhibits, distance exhibits, exhibits showing operating conditions, and one or two other miscellaneous matters.

(1588) My first exhibit is C. B. A. page O, shown by the symbol in the lower right hand corner for the purpose of identification. It shows the present rate from what is termed Group 1, in the Davis tariff, consisting of the Ohio No. 8 and the Cambridge districts, and shows the present and the prior rates from that group to the northeastern Ohio destinations, namely: Canton, Massillon, Akron, Orrville, Cleveland, Rocky River, Lorain, and Huron, Ohio,

these destinations being the destinations in northeastern Ohio with which practically all of my testimony deals. I have selected these points for (1589) specific treatment [fol. 1822] because they are points named in paragraph 2 of the carrier's petition of October 20, 1932, in this proceeding, plus the two destinations involved in the Republic case before the Ohio Commission.

The Cambridge and the Ohio No. 8 districts which are described differently by various carriers, have for many years been grouped under the designation of Group 1 in the Davis tariffs, and preceding tariffs, and generally take the same rates to destinations in Ohio and beyond Ohio, except for certain short-haul destinations. It will be noted that what is commonly termed the Ohio No. 8 district has different destinations on different railroads. Group 1 is defined in the tariffs by enumerating the various No. 8 districts and the Cambridge district in the order shown in the footnote on the exhibit. While the Davis tariff treats the No. 8 and Cambridge districts as a single group in this matter, I have for convenience in my other exhibits referred to them by their customary names. When I speak of the various No. 8 and Cambridge districts I refer to the designations that appear in the footnote on the Group 1 mines (1590), and that enumeration is taken intact from the [illegible]ff. That is the carrier's definition of Group 1. It shows the various No. 8 and Cambridge districts interspersed among one another,—not separated.

I numbered my first exhibit No. 245.

(Exhibit 245, Witness Ackerman received in evidence.)

[fol. 1823] My next exhibit bears the key number C. B. A. 1, and consists of three pages. This exhibit shows the average distance to the eight selected destinations from the No. 8 and Cambridge districts. Where No. 8 and Cambridge take the same rate there is one average shown for both. Where No. 8 and (1591) the Cambridge districts take different rates, each is shown with a separate average and a grand average made for both. In calculating my distances I have in every instance shown the short tariff routes, except from Cambridge.

The origins used are shown in the mine list on page 3. This list was taken directly from Exhibit 40 in the Republic case before the Ohio Commission, which is in evidence in

this proceeding as part of the record in that case. It shows the active mines in the No. 8 and Cambridge districts from January 1, 1929, to March 31, 1930, and was accepted by the Ohio Commission as a proper basis for computing the average distances involved in the Republic case, and, therefore, was the basis for the rates which brought about this proceeding.

I have compared this list with the present mine list of active mines presented by Witness Kern, and find a very slight difference in distance resulting from the use of either Kern's list or Exhibit 40 list, and what differences there are are slight and show that the present active mines list result in distances slightly shorter than those resulting [fol. 1824] from the mine list used by the Ohio Commission. This is my Exhibit No. 246.

(Exhibit 246, Witness Ackerman, received in evidence.)

(1592) In making my average distances I have used the short tariff route, not unduly circuitous, from each of the mines in the mine list. In the case of No. 8 district I did not exclude any route as unduly circuitous, but used the short tariff route in each instance. In the case of the Cambridge district I have excluded a large number of the tariff routes as unduly circuitous, and have constructed short, workable routes by a recognized junction over which traffic is particularly moving at the present time.

I have two exhibits which will follow in a moment, showing in detail the excluded tariff routes and the substituted workable, direct routes. Referring to the exhibit, the average distances to eight destinations are shown in the second column from the right, as follows (1593):

Ohio No. 8 to Canton	73	miles
Cambridge to Canton	82	"
Ohio No. 8 and Cambridge combined to Canton	74½	"

I average No. 8 separately, and then average Cambridge separately, and then throw them together to Canton, because the rates are different to Canton (1594).

[fol. 1825] No. 8 and Cambridge to Orrville	88.7	miles
No. 8 to Massillon	77.5	"
Cambridge to Massillon	78.9	"
No. 8 and Cambridge combined to Massillon	77.7	"
No. 8 and Cambridge to Akron	99.1	"

No. 8 and Cambridge to Cleveland	132.3	"
No. 8 and Cambridge to Rocky River	141.1	"
No. 8 and Cambridge to Lorain	139.9	"
No. 8 and Cambridge to Huron	159.8	"
No. 8 and Cambridge to Cleveland, Rocky River, and Lorain—average	137.8	"

In the case of my No. 8 distances I said that I did not reject any tariff routes as unduly circuitous and substitute reasonably direct operating routes. I would like slightly to qualify that in connection with one of my routes to Huron, on page 2. On the Pennsylvania Railroad, the Ohio No. 8 is split and the route from part of the mines is through Sandusky; and I have ignored that from that section of the mines and routed it all through Cleveland to prevent the long and short haul violation which would occur at Sandusky,—this refers to the fourth item on page 2, that is, Ohio No. 8, Pennsylvania R. R. to Huron, Cleveland, 132.9, N. Y. C., 50.5, Number of mines, 15. Certain of those mines carry tariff routes in the manner shown, and certain others carry tariff routings via Sandusky.

[fol. 1826] (1595) In case shipments were routed through Sandusky, they would run through affected territory and through a territory taking the rate of $1.74, and would violate the State long and short haul clause.

(1597) For the average distance formula employed by me in this exhibit, I have as authority the decision of the Ohio Commission in the Republic case and various decisions of the Interstate Commerce Commission, which latter I have set forth in exhibit key No. 1 B, which will be Exhibit No. 247.

(Exhibit 247, Witness Ackerman, received in evidence.)

This exhibit shows excerpts from certain decisions of the Interstate Commerce Commission dealing with this average distance formula. The formula provides for the use of the short tariff route, not unduly circuitous, from all mines.

So far as my Ohio distances are concerned, the only important difference between this formula and that employed by Mr. Kern is that he used all tariff routes, whereas I used the short tariff routes not unduly circuitous. My list of mines is the same as that offered by the Railroads in the Republic case, and the substitution of Mr. Kern's list in

this case (1598) for the list used by me would not appreciably change the result. In no event will Mr. Kern's present active mine list change the block of the 23922 scale in which the distance will fall. In fact, the distances from Mr. Kern's list of active mines via short tariff routes not unduly [fol. 1827] circuitous are slightly shorter than the distances used by me.

If I take my formula and apply it to the information contained in Mr. Kern's Exhibit No. 12 I get slightly shorter distances. The difference between my distances and Kern's is due to the fact that he used all tariff routes, whereas I use short tariff routes not unduly circuitous. I did not make any check to ascertain what the effect would be of the use of all tariff origins, as Mr. Kern did in one of his computations; but he testified that the difference between all tariff origins and his active mine list was of no importance. So I did no further work in that direction.

[fol. 1828] (1599) In coal districts as large as those in the Appalachian fields there are many points included in the tariff from which no coal has ever been shipped and none is ever likely to be shipped, and we feel for that reason that some formula must be used for obtaining a mine list and excluding tariff origins which would never ship coal. Furthermore, the tariff list as used by Mr. Kern contained many duplications. As an illustration, the B. and O. R. R. in the Davis tariff, lists both mines and stations, and by using such a list duplications result, because there may be three mines and one station listed, where, in order to obtain an accurate result, the station should be discarded. Another illustration is the B. & L. E. in the Pittsburgh district. Mr. Kern lists 15 origins whereas actually there are only 4 mines served by that railroad in the Pittsburgh district. The 15 origins include stations, mines and other railroad facilities in that district. Because of these considerations, it is necessary to get some sort of mine list if we are going to make a fair average distance from a mining group (1600), and it is necessary to discard tariff origins which are not potential points of origin of coal.

As between the active mine list used by the carriers in the Republic case and that used by them here, I find no important difference—none that would change the block in which the rates would fall.

[fol. 1829] My next two exhibits, which are maps, show the circuitous tariff routes from the Cambridge district which I have rejected, and the feasible operating routes that I have substituted for them.

The first exhibit, Key No. CBA 1-a, Exhibit 248, deals with the Cambridge route via the Pennsylvania R. R. The tariff routes are shown on the map in solid lines and the proposed routes we have constructed are shown by broken lines. The broken lines have different characters for the purpose of identifying the different railroads.

Taking Cleveland as an illustration, the tariff route at present is through Newcomerstown, Dover, Valley Junction, Bayard and Ravenna. We have used the same route as far as Valley Junction, thence the B. & O. R. R. from Valley Junction through Canton and Akron into Cleveland. It will be observed that the broken line from Valley Junction to Akron (1601) parallels the solid black line, indicating that the same routing is recognized in the tariff for the movement of traffic to Canton and Akron, but not to Cleveland.

To Orrville the tariff route is through Bayard, thence west through Canton and Massillon over the Pennsylvania Railroad. We used the Pennsylvania Railroad to Dover, then the B. & O. Railroad to Justus, and then the W. & L. E. Railroad beyond to Orrville. To Massillon the present tariff [fol. 1830] routing is the same as to Orrville. We used the Pennsylvania Railroad to Dover, then the B. & O. Railroad to Massillon. To Lorain the present tariff routing is the Pennsylvania Railroad through Dover, Valley Junction, Bayard, Ravenna to Cleveland, then the Nickel Plate Railroad to Lorain.

We used the Pennsylvania Railroad to Dover, then the B. & O. Railroad to Lorain. To Huron the tariff routing is the Pennsylvania Railroad through Newcomerstown, Coshocton, Mansfield, Carrothers, Bellevue, thence the W. & L. E. Railroad or the Pennsylvania Railroad to Sandusky, thence the N. Y. C. Railroad. However, the traffic is actually handled from Newcomerstown through Coshocton, Trinway, Columbus and Marion.

The route last referred to is a very circuitous route that goes down to the lower lefthand corner of the map. (1602) That is the way the business actually moved; thence north through Carrothers, Bellevue and Sandusky. The latter two

are both in affected territory. Carrothers may be, but I have not checked it. Marion is on the border line, as I recall. In any event, both the short tariff routes to Huron and the routes of actual movement go through affected territory. The only way that can be avoided is by the use of my formula and the rejection of those routes and the substitution of reasonably direct routes.

[fol. 1831] (1603) At the top of the map are shown the distances of the tariff routes and of the substituted routes used by us, together with the percentage of circuity of the tariff routing. Using the tariff routing and distances the percentage of circuity is 21.1 per cent. Using the routing of actual movement the percentage of circuity is 33.7. The range of circuity is from 6.3 per cent at Rocky River to 48.6 per cent at Orrville, and averages 21.1 by using the tariff routes; 33.7 per cent by using the actual routes. In arriving at the total percentage of circuity I have excluded the routing to Canton and Akron because we have used the tariff routes to those points.

I will illustrate the way in which the exhibit should be read, by explaining the first three lines in the table. From Cambridge to Canton the tariff routing is via the Pennsylvania Railroad, Valley Junction and the B. & O. Railroad, a total distance of 81.4 miles. This is a reasonably direct route and we did not substitute any other route in place of it. This appears from the fact that the same routing is shown in the right hand half of the table, under the heading "Suggested Routes," and the figure (1604) in the column showing the percentage of circuity is left blank.

[fol. 1832] The next tariff routing is to Orrville via the Pennsylvania Railroad direct, 128.4 miles. We rejected this and used instead the Pennsylvania Railroad to Dover, the B. & O. to Justus, and the W. & L. E. to Orrville, a total distance of 86.4 miles.

The difference in mileage between those two is 42 miles. In this instance the tariff route is 48.6 per cent circuitous as shown in the right hand column. The third tariff route is to Massillon via the Pennsylvania Railroad direct, a total distance of 114.4 miles. I reject this route and substitute the Pennsylvania Railroad to Dover and the B. & O. a total distance of 78 miles. As shown in the last column, the tariff route in this instance is 46.6 per cent circuitous. In the case of the routes to Huron, I compared the substituted route not

only with the tariff route but also with the route of actual movement through Columbus which is even more circuitous than the tariff route. At the present time no service is being operated on the line from Coshocton via Mansfield and Carrothers except one local freight train a day, (1605) and all through freight is hauled via Columbus.

I have shown the Crooksville district on this map because the same situation with respect to circuitous routes applies from Crooksville as from Cambridge.

This map and the one following are geographically correct. They are copied from the Ohio Railroad Commission-[fol. 1833] ers' official map.

I now refer to and shall briefly explain my routing map covering the Baltimore & Ohio Railroad from the Cambridge district.

This map, Key No. CBA 1-b, Exhibit 249, is similar to the previous map. It deals with the B. & O. from Cambridge, the route of movement at present being from Cambridge east through Bellaire and Bridgeport, thence in a general northeasterly direction to Dover. The distance over the suggested route from Cambridge to Dover is 46 miles, whereas over the route of movement it is 125 miles. The table at the bottom shows in detail each tariff route and the reasonably direct route substituted therefor in my distance exhibit. The percentage of circuity range from 21.3 (1606) to 78.1 and average 43 per cent as against the tariff routes. As against the routes of movement the average percentage of circuity is 44.2 per cent.

(Exhibit 249, Witness Ackerman, received in evidence.)

I am asked whether I have information with respect to the former inclusion of the Valley Junction route in the B. & O. tariffs. Up to July 19, 1927, the tariff was open to [fol. 1834] permit routing via the B. & O., Cambridge and Pennsylvania Railroad through Valley Junction and Canton and Akron to Cleveland, both B. & O. and the Pennsylvania Railroad concurring. On July 19, 1927, the tariff was restricted as to the B. & O. At the present time there is routing from Pennsylvania mines in the Cambridge district to Boston Mill, Ohio, on the Baltimore & Ohio Railroad, 20.1 miles south of Cleveland.

That would be on the dotted B. & O. line south of Cleveland on my exhibit 249—between Akron and Cleveland. It

would be 20.1 miles south of Cleveland. As far as that point this route is still open under the tariff, but beyond it, including Cleveland, it is closed.

(1608) The Valley Junction route was open to Cleveland for many years prior to the date just given by me. I did not go back in the tariffs to see how far, but I did check a few prior tariffs. So far as I know, it was always open before that date.

Testimony taken at Washington, D. C., Jan. 10, 1933

Direct examination of C. B. Ackerman, continued.

By Mr. Ballard:

(1614) I have referred in my exhibit 247 to the formula which calls for the use of short tariff routes, not unduly circuitous in computing the average distance from origin districts, and in my exhibits 248 and 249 I have shown the unduly circuitous routes from the Cambridge districts which I rejected and the reasonable routes which I substituted for [fol. 1835] them. I am asked to state what test I applied in making this substitution to determine what (1615) tariff routes are unduly circuitous and what routes are reasonable.

A test for determining what tariff routes are unduly circuitous and what routes are reasonable and should be substituted for them is found in the report of the Ohio Commission in the Republic Case where this formula was used in fixing the Canton and Massillon rates. On page 10 of the Ohio Commission's report in the Republic Case, which is Exhibit 1 in this case, the following passage appears:

"Section 15, paragraph 4, of the Interstate Commerce Act, provides that no carrier can be compelled, without its consent, to participate in a joint rate, over a route, which embraces substantially less than the entire length of its railroad between termini. However, there is no such statutory provision in the General Code of Ohio, similar to the said provision of the Interstate Commerce Act. In this state, the law does not guarantee to a carrier its long haul, whether it be the initial, intermediate, or the delivering carrier, and manifestly we are not bound by a statute that applies only to Interstate Commerce. It is the view of the Commission that freight traffic should ordinarily move over the shortest

[fol. 1836] reasonable routes and therefore distances for rate-making purposes should, in most cases, be figured over the shortest reasonable routes over which shipments can be made without transfer of lading, although we would not usurp a (1616) carrier's discretion to move shipments over a route which it has demonstrated to be the most economical, provided the rate is reasonable and otherwise lawful."

On the authority of this passage from the Ohio Commission's decision, I substituted the shortest reasonable routes over which shipments can be made without transfer of lading whenever they were shorter than the short tariff routes, unless the substitution would not change the mileage block of the scale and, therefore, would not affect the rate.

In determining what would be a reasonable route to be substituted, I considered whether or not the substituted route was feasible for the regular movement of carload traffic and not merely whether carload traffic could be moved that way without transfer of lading.

As generally prescribed by the Interstate Commerce Commission, a distance scale reflects only the earnings which the short line carrier will earn and rarely ever results in the same earnings on lines which have longer routes than the short line route between any given point of origin and desti- [fol. 1837] nation. I, therefore, think it is fair to use the shortest feasible route from each mine, substituting it for the short tariff route if it is shorter, because that is the basis on which the Ohio Commission said the rate should be made.

(1617) I have made some computations from Mr. Kern's exhibits in order to ascertain the short tariff route average mileages from the southern Ohio districts to the eight northeastern Ohio destinations, based on Mr. Kern's data. Those averages are as follows:

To Cleveland, Ohio: From the Hocking District, 199.2 miles; from the Pomeroy District, 252.3 miles; from the Crooksville District, 170.9 miles; from the Jackson County District, 294.4 miles; grand average from all of the southern Ohio groups mentioned, 210.5 miles.

To Lorain: From Hocking, 228 miles; from Pomeroy, 278.7 miles; from Crooksville, 209.9 miles; from Jackson County, 297.8 miles; grand average to Lorain from all of the southern Ohio groups named, 238.3 miles.

To Huron, Ohio: From Hocking, 253.4 miles; from Pomeroy, Ohio, 307.4 miles; from Crooksville, Ohio, 188.3 miles; from Jackson County, 292.9 miles; grand average to Huron from all of the southern Ohio groups named, 249.9 miles. [fol. 1838] (1618) To Canton, Ohio: From Hocking, 167.2 miles; from Pomeroy, 255.9 miles; from Crooksville, 128.5 miles; from Jackson County, 297.8 miles; grand average to Canton for all of the southern Ohio districts named, 182.2 miles.

To Massillon: From Hocking, 159.6 miles; from Pomeroy, 253.6 miles; from Crooksville, 121.3 miles; from Jackson County, 240.8 miles; grand average to Massillon from all of the southern Ohio groups named, 167.9 miles.

To Akron, Ohio: From Hocking, 177.1 miles; from Pomeroy, 253 miles; from Crooksville, 149.1 miles; from Jackson County, 266.5 miles; grand average to Akron from all of the southern Ohio groups named, 192.2 miles. Those mileages do not give effect in any manner to the unduly circuitous element in the formula. Before they could properly be used for scale making purposes that element would have to be given weight. From my investigation of the Cambridge mileages I know that at least some of these southern Ohio mileages are unduly circuitous.

(1620) My next exhibit, key No. 2, Exhibit 250, consisting of one sheet, is a scale of rates, prescribed by the Interstate Commerce Commission for application from Indiana origin points to destinations in central and eastern Illinois and within Illinois. As shown in the notes, this scale was pre- [fol. 1839] scribed first up to 100 miles and then up to 130 miles in the Illinois 13th Section Case, No. 23130, and was extended to 300 miles in the Coal Trade Association of Indiana Case No. 23922. In addition to this scale, the Commission prescribed numerous point-to-point rates in No. 23130, many of which were on a lower basis than the scale. These rates will be referred to in later exhibits.

(Exhibit 250, Witness Ackerman, received in evidence.)

My next exhibit, C.B.A. No. 3, Exhibit No. 251, shows the short-line distances as arrived at and explained in connection with Exhibit C.B.A. 1, Exhibit 246, to northeastern Ohio destinations from the Cambridge and Ohio No. 8 groups compared with the 23922 scale for those distances. It will be noted that except from Cambridge to Canton and Mas-

sillon, where the intrastate rates have not been reduced, the present rates are (1621) exactly on the 23922 scale, with the following exceptions:

The Orrville rate is 7 cents above the scale; the Akron rate is 6 cents above the scale; and the Rocky River rate is 10 cents below the scale. However, if Rocky River, Lorain, and Cleveland be treated as a destination group on the basis of their average distance, they are all exactly on [fol. 1840] the scale.

(Exhibit 251, Witness Ackerman, received in evidence.)

My next exhibit is Key No. 3-b, Exhibit 252. Because the rates ordered by the Ohio Commission in the Republic case were the occasion for all of the other reductions, as explained by Mr. Durham, I have prepared this exhibit comparing the rates prescribed in that case with the 23922 scale, using the distances which the Ohio Commission found in its decision. This exhibit shows that the rates prescribed by the Ohio Commission are exactly on the 23922 scale except from Black Oak Mine No. 2 to Massillon, Ohio, which is 8 cents above the scale. That is the third item on the exhibit.

(Exhibit 252, Witness Ackerman, received in evidence.)

My next exhibit, key No. 4-a, Exhibit No. 253, is an exhibit showing Indiana-Illinois point-to-point rates prescribed or approved by the Interstate Commerce Commission arranged in (1622) distance order and compared with the 23922 scale. The purpose of this exhibit is to show the relationship between that scale and the Commission-made point-to-point rates in the same general territory. All of the items carrying asterisks are taken directly from the appendix of the [fol. 1841] report in No. 23130.

It will be seen from this exhibit that while a few of the point-to-point rates are above the scale, most of them are on or below it, the average of the point-to-point rates being $1.19 and the average of the scale rates $1.28, as shown at the bottom of page 4. Every point-to-point rate shown on this exhibit was prescribed prior to the Commission's decision in 23922.

In prescribing the scale in that case the Commission was simply following the rate level that had already been constructed as a result of its prior decisions, as the Commission itself pointed out in the report in No. 23130. All of these

point-to-point rates are now in effect and most of them move large volumes of traffic. For example, on page 3 there is a very heavy movement into East St. Louis, Ill., from Group 10, which is a southern Illinois group.

There is a substantial movement into Paris, Ill., from the Brazil-Clinton group and a heavier volume from the Linton-Sullivan group. Brewer, Ill., shown on page 1, is the point at which the Danville switching yards of the C. & E. I. are located, and there is a substantial movement of coal (1623-5) delivered at that point.

There is a substantial movement of coal to Hoopeston, Ill., from the Brazil-Clinton group, a heavy movement of coal [fol. 1842] to Champaign, Ill., and Urbana, Ill., from the Brazil-Clinton group, a substantial movement of coal from the Princeton group to Paris, Ill., also to Champaign and Urbana, Ill., a substantial movement of coal to Hoopeston, Ill., from the Princeton group, a very heavy movement to Chicago, Ill., from the Brazil-Clinton group, Linton-Sullivan group, and Princeton and Booneville groups.

I am asked to look at page 3 of the exhibit, at the mileage blocks running from 100 miles to 140, and point out to what extent the point-to-point rates in Illinois and Indiana are below the 23922 scale. Group 16, Illinois, to East St. Louis, Ill., the rate prescribed and approved by the Interstate Commerce Commission is 96 cents; the scale rate is $1.28. From Group 10, Southern Illinois, to East St. Louis, the rate prescribed by the Commission was $1.05, and the point-to-point rate is $1.28. The scale rate is $1.28. From Group 12, Illinois, to East St. Louis, Ill., the rate prescribed by the Commission (1626) was 97 cents, and the scale rate is $1.28 for the same distance. In the same block there is one point-to-point rate 2 cents above the scale—from Brazil-Clinton to Mahomet, Ill., as against three point-to-point rates that are very decidedly below the scale. That is the block that our Akron rate falls in.

[fol. 1843] Group 13, Illinois, to East St. Louis, Ill., the rate prescribed by the Interstate Commerce Commission is $1.03; the scale rate for that distance would be $1.40.

From the Princeton group to Mays, Ill., the rate prescribed by the Interstate Commerce Commission is $1.27, and the scale rate for that distance is $1.40. The same is

ture of Conlogue, Ill., the same rates and same distances; also to Dudley, Ill., the same rates and same distances.

From the Linton-Sullivan group to Champaign, Ill., the rate (1627) prescribed was $1.45, but the scale rate there is 5 cents under.

Now, referring to the next block, which is the No. 8-Cleveland block, the rate from Danville, Ill., to Chicago, Ill., was prescribed at $1.35, which is the same as the rate prescribed by the Illinois Commerce Commission between the same points. The scale rate for that distance would be $1.45.

From the Danville group to Vermillion, Ill., the rate prescribed by the Commission is $1.27; the scale rate is $1.45.

From the Linton-Sullivan group to Mansfield, Ill., the scale rate is 5 cents under the prescribed rate of $1.50.

[fol. 1844] That sort of comparison could be made throughout the exhibit.

I am asked if I am able to say whether, generally speaking, the rates in the Illinois-Indiana territory, which are below the scale, move large volumes of traffic.

(Objected to unless witness can show his authority for that and unless witness is qualified to testify as to movement.)

The Witness: I think I am as to some of them.

Examiner Trezise: Is he qualified? Have you qualified him?

Mr. Ballard: Yes, I will be very glad to take time and qualify him.

(1628) I am asked to state what connection I had with the hearing in 23130 and 23922.

In 23130 I represented the West Kentucky operators, and also represented the receivers of coal at Dixon, Ill., in 23922. I took part in the hearing of that case and testified as to movement and transportation conditions. I also heard considerable of the testimony of other witnesses as to movement and transportation conditions.

In 23922 I represented the receivers of coal in that case. I think I represented all, with possibly one exception. I testified about transportation conditions and volume of movement. (1629) I put in, in that case, tabulations showing transportation conditions, and another tabulation showing the weighted average haul. In order to compute

the weighted average haul I had to know the volume of [fol. 1845] each route. I had before me the freight bills of the receivers of coal.

I am asked whether my information with respect to volume of movement in connection with those two cases relates to points shown on my exhibit 253, or any of them. Many of these points were covered by the scope of that complaint. I represented the receivers of coal at other points shown on this exhibit also. By reason of that employment I am familiar with the volume of movement of coal, in a general way, to such other points.

Mr. Day: I insist on my objection, if Your Honor please. None of the witness's answers tend to show that he is familiar with the movement of coal between any points. Merely stating that he participated in some cases or that he filed claims for reparation for certain receivers of coal does not qualify this witness to testify as to movement.

Examiner Trezise: Very well, Mr. Day; we will rule out what somebody else said about the movement and let him state what he knows about the movement himself.

The Witness: I represented all of the receivers of coal at Danville, Illinois——

By Mr. Ballard:

Q. The ruling, Mr. Ackerman, is that you are to state what you yourself know about the movement; that is, state the facts. I do not mean for you to recite your qualifications any further. That is it, if I understand the ruling correctly.

Examiner Trezise: That is it.

There was a movement of coal into Danville, Ill., from [fol. 1846] Newport, Ind. That mine, from the last information I have, is not in operation. There was a movement during the period covered by the complaint cited in 152 I. C. C. 555. I represented the Danville receivers. (1631) There was a movement during the period covered by the complaint but I cannot fix the time with greater definiteness unless I have the report before me.

Page 1 of exhibit 253, in the second block, the next to the last item, shows a movement to Paris, Ill., from the Brazil-Clinton group. That movement exists at the present

time and has existed for many years in the past. (1632) That coal is currently shipped from the Brazil-Clinton group to the receivers of coal at Paris, Ill., unloaded from tracks at that point and sold. I am able to say there was a movement within the last four or five months. I investigated the movement somewhere about that period.

[fol. 1847] (1633) There is a movement from the Linton-Sullivan group to Paris, Ill., a very limited movement into Mays, Ill., of practically no consequence. The same is true of Dudley, Ill. That is from Linton-Sullivan and Brazil-Clinton. There is a movement into Ridge Farm, Ill. There has been a movement and there was a movement during the period of the complaint from Brazil-Clinton to Brewer, Ill.

There is a substantial movement of coal into East St. Louis, Ill., from southern Illinois group. That is Group 10 on page 3. There is a small movement from the Linton-Sullivan group into Georgetown, Ill., on page 2. There is a considerable movement into Champaign and Urbana (1634), Ill., from the Brazil-Clinton group shown on page 2, the last block. There is considerable movement from the Princeton group to Paris, Ill., and also from Linton-Sullivan group to Urbana, Ill., and Champaign, Ill. The movement into Conlogue, Mays and Dudley is not of considerable importance. There is a considerable movement into Paris, Ill., but not very heavy from the Danville group.

As to Chicago, from the Brazil-Clinton group there is a very substantial movement. The same is true of the Linton-Sullivan group. That is the 250-mile block and [fol. 1848] on page 4 of the exhibit it should read Danville, Ill., instead of Danville, Ind.

There is a movement from southern Illinois into Danville, Ill. There is a considerable movement from Princeton, Ind. (1635), and Booneville groups to Chicago. There are large strip mines at Booneville that ship coal into that territory. That is true also of the Princeton, Ind., group.

Information with respect to the movement, as to its existence and extent, can be obtained from the reports cited in the left-hand colume of this exhibit, so far as the report shows the movement.

I have already pointed out that at the bottom of page 4 I show the average of the rates prescribed or approved and the average of the scale rates (1636), the prescribed or approved routes being 9 cents below the scale routes on the average.

My next exhibit, key No. 4-b, Exhibit 254, is a comparison of the rates from Ohio No. 8 and Cambridge to northeastern Ohio destinations with point-to-point rates prescribed by the Interstate Commerce Commission in the Indiana-Illinois territory. It is arranged by mileage blocks of the 23922 scale, and it will be noted that generally the point-to-point rates prescribed by the Interstate Com- [fol. 1849] merce Commission for application in the Indiana-Illinois territory are lower than the Ohio rates here under investigation. Cambridge to Canton and Massillon is not included for the reason that those rates have not been reduced.

This exhibit is arranged so the two center columns can be read together and compared, the two columns headed "Rate." The left-hand column is the Ohio rate here under investigation and the right-hand is the point-to-point Indiana-Illinois rate prescribed or approved by the Interstate Commerce Commission. (1637) It is simply a rearrangement of some of the information on the preceding exhibit.

My next series of exhibits consists of a set of locomotive performance charts showing the operating conditions on all important routes from the No. 8 Ohio and Cambridge districts to the eight destinations in northeastern Ohion and on all the important routes in the Indiana-Illinois territory in which the Commission prescribed the 23922 scale and the 23130 scale.

(Mr. Ballard here states that the exhibits are offered on behalf of the W. & L. E. as well as the coal operators.)

[fol. 1850] (1638) I am asked whether in my previous testimony I fully defined what I mean by unduly circuitous. I cannot add very much to my answer except to say that in my opinion any route which will result in a shipper paying more for his transportation than his competitor would pay over a short reasonable route between the same points is unduly circuitous. It depends upon the rate as well as the distance.

(1641) I am asked by the Examiner whether I mean to say that any route which is longer than the shortest route is unduly circuitous. I do not mean it that way.

Any route that is longer than the short route, if it results in making a higher rate (1642) over the long route, makes the long route unduly circuitous, for rate-making purposes, in my opinion. But that has nothing at all to do with the manner in which the carriers may handle the traffic. When I say the shortest route, I do not mean air-line mileages, but reasonable working routes.

I am asked whether, if the route is 200 per cent circuitous but still takes the same rate as the shortest route, is that not unduly circuitous. For rate-making purposes it would not be considered unduly circuitous to the shipper, as I see it, because he would not be particularly concerned [fol. 1851] as to how the carriers moved it.

When I say unduly circuitous in this testimony I refer to undue circuity for rate-making purposes only, and not for the purpose of movement of traffic. This distinction is one that is encountered in every-day practice in the application of a distance scale. The short line distance is usually used for rate-making purposes and the carrier is left free to move (1643) the traffic over any routes at the same rate. If they move it over the long route and charge the high rate, that is a circuitous route. (1645) In all my experience I have had very few occasions come to my attention where any route except the short route got the full measure of the distance scale.

[fol. 1852] (1646) I am asked to refer to the passage from page 10 of the Ohio Commission's report and to read from page 2 of my memorandum, beginning at the second line. This reads: "Therefore, distances for rate-making purposes should, in most cases, be figured over the shortest reasonable routes over which shipments can be made without transfer of lading."

(1647) I am asked to refer to my locomotive charts and to state how they measure locomotive performance. The charts show for each section of railroad studied the size of locomotives in service, the tractive power of these locomotives, the number of tons those locomotives haul in a train under ordinary practice, and the distance of the run of the various locomotives in service. An average has been made for each entire route studied showing the pounds of

tractive power required to haul one ton one mile per mile of line based on the average train over the entire route and the average tractive power required to haul that train over the entire route. The exact mathematical process will be explained in connection with the first locomotive performance chart.

(1648) The tonnage rating of a locomotive takes into account all factors with which the operating department is confronted in the movement of trains, and is the result of the experience of the railroads in moving traffic over the particular divisions for which the tonnage rating is prescribed. It takes into account curves, grades, the speed element with which the train is moved over the division, be- [fol. 1853] cause as the speed of a train increases the tonnage which a locomotive can haul decreases. and other factors such as train limits, because of local municipal regulations, length of passing tracks, location of interlocking plants, and other factors. The tonnage rating of the locomotives is the rating which governs the yard department in making up the trains for movement on the road, and the yard departments must adhere strictly to the tonnage ratings assigned to the particular locomotive unless some special circumstances prevent their doing so.

(1650). As an illustration, time table No. 105 of the Knoxville Division of the Louisville & Nashville provides: "Adjusted tonnage ratings must be used in loading engines."

Time table 122 of the Kentucky Division of the Louisville & Nashville (1651) provides: "Tonnage as indicated must not be exceeded but must at all times be given unless otherwise instructed."

Time table No. 122 of the Wheeling & Lake Erie provides: "The rating shown above for the different classes of engine can be hauled when the conditions are favorable. When on account of adverse conditions engines are unable to haul their rating, the superintendent will authorize such reductions as the conditions warrant. When engines are incapable of pulling their rating from any cause, written explanation will be made by enginemen by wire to the superintendent."

Time table 36 of the Sciota Division of the Norfolk & Western provides graduated tonnage ratings according to [fol. 1854] weather conditions and states: "In case of ex-

traordinary weather conditions the dispatcher will make the reductions as necessary in order to keep trains moving."

Time table 36 of the Pocahontas Division of the Norfolk & Western provides: "In case of snow or other extraordinary conditions the dispatcher will be governed thereby, making such further reductions as conditions may require to keep the trains moving."

Time table 73 of the Bessemer & Lake Erie provides: "When engines cannot haul full rating, enginemen must advise by message what tonnage can be handled."

(1652) Time table 2 of the Mahoning Division of the Erie Railroad provides: "Tonnage for each train will be given at yards and each dispatched train will be given 100 per cent rate unless otherwise directed."

The size of the trains or the tonnage rating of the trains is of course dependent, among other things, upon the tractive power of the locomotive which hauls that tonnage, and railroads in their ordinary practice endeavor to get the maximum efficiency out of the amount of tractive effort available to haul the traffic. This is reflected in the type of power assigned to each train rating district in actual practice. The formula, which combines the train rating and the tractive effort of the locomotive used, therefore, reflects all of the conditions encountered in actual operations.

I secured the information with respect to tractive power, [fol. 1855] train ratings and other operating details which are necessary to make such computations from actual field investigations of all of the lines and terminals covered by these exhibits. This information has likewise been verified and adjusted in the light of information furnished by the carriers in various cases in which I have offered similar evidence.

(1653) I have traveled by automobile extensively over the States of Ohio, Indiana and Illinois and have visited the assembling points and division points of the various railroads where this information was obtainable. I have been investigating railroad operating conditions in these three States for the purpose of securing and submitting this type of information since 1928 or before, and have brought it up to date for the purposes of this case. In all, I have spent a great many weeks on the ground and have sufficiently covered all of the routes included in my exhibits to

secure first-hand information with respect to their train service requirements.

My first exhibit, CBA 5, Exhibit No. 255, consisting of three pages, is a chart which describes the performance of locomotives from Ohio No. 8 fields on the Wheeling & Lake Erie and P. & W. V. to northeastern Ohio destinations. The name "Idena," the third station up, near the bottom of the map, should be corrected to "Adena."

(1654) The assembling points are shown by double open circles. The destinations are shown by black dots surrounded by circles. The open circles with a line drawn at [fol. 1856] right angles through the circles are points at which the tonnage ratings of the locomotives in service change. Between these circles is shown, first, the symbol "M," with a figure following, which means the distance in miles between the points shown. For example, referring to the tonnage just below Mogodore, "M" 27.4 miles indicates the miles from Canton to Kent.

The second figure following the "L" is the type of locomotive in service. The figure following the letters "G. T." is the gross tons that the locomotive in service will haul over the section of track designated.

As an illustration, from Dillonvale to Rexford, the distance is 15 miles; the type of locomotive is designated by the (1655) Wheeling & Lake Erie as a 104 per cent locomotive, and the number of tons that locomotive hauls over that section of track is 3,500 tons. Those are gross tons hauled by the locomotive between the locomotive and the caboose, and constitute the tonnage rating which the locomotive in service is ordinarily given when the tonnage is available.

Between Sandyville and Cleveland on the B. & O. Railroad in connection with tonnage rating of 2,269 tons is shown reference mark 2. This reference mark is explained at the bottom of the tabulation and indicates that the schedule rating of the locomotive is 2,700 tons, with an adjustment factor of 15 tons per car. The B. & O. and some other railroads in this and other sections, in order to arrive at the tonnage given a locomotive, use what they term an [fol. 1857] adjustment method of arriving at their train tonnage, which consists of adding an arbitrary figure per car to each car in a train, which in this instance is 15 tons. The object of this arbitrary addition is to compensate, in

the making up and transporting of their trains, for the wind and wheel resistance encountered in the movement of trains, and serves to balance the length of the trains with the number of cars hauled, because the tonnage which a locomotive can haul is determined greatly by the length of a train as well as by the weight of the train and, in order to strike a balance between the weight of the train (1656) and the length of the train this arbitrary factor is added to each car, it being recognized that the resistance of a ton of freight is less in a heavily loaded car than it is in a lighter loaded car.

Referring again to the Mogodore illustration, the figure 5385 opposite the "G. T." indicates the actual gross tons that the locomotive hauls, and which the yard department is instructed to give the locomotive. It represents the rating in effect between those two points. This is true as to all other places on the exhibit where I show figures opposite "G. T."

(1657) Wherever there is an adjusted rating the adjustment factor is compensated for and the actual gross tons are shown. There is a note on every exhibit explaining where the figures are adjusted and where not.

Referring to the item 104 per cent under "L," type of locomotive—that is the designation which the Wheeling [fol. 1858] & Lake Erie has given to that type of locomotive. Railroads designate their locomotives in different terms.

(1658) The "G. T. 5385" opposite Mogodore is not a theoretical rating. It is the rating which the yard department must observe in making up their trains—subject to such changes and conditions as I have described in the time tables to which I referred. That is the summer rating, and not the rating which would be encountered in zero or freezing weather. It is what the operating department prescribes for the ordinary, everyday movement of their trains under favorable conditions. It is a normal rating.

(1659) I am asked whether the railroad does not fix the best rating it can hope to get out of an engine. I won't say that, because I know of cases where they have exceeded the tonnage rating slightly under exceptional conditions. Those are the ratings which they can handle comfortably over the railroad in ordinary cases. In some cases they are very much less than they can handle—for example,

where they want to make speed rather than handle freight.

These are not intended to be the time freight ratings. From a practical standpoint, they are maximum ratings, inasmuch as the yard department is instructed to give to these engines only that much; and they might also be termed minimum ratings under ordinary conditions, because if they had the tonnage available and there were no particular circumstances which would necessitate a reduction, that is what they would get. (1660) If the tonnage is there, [fol. 1859] they get this much and no more or less—except that there may be half a dozen tons one way or the other because they cannot divide a car.

Where they run a train on schedule, such as a merchandise schedule, and it has to run at a certain time, it might be correct to say that it is different from a maximum and minimum rating. But for the ordinary handling of dead freight, such as coal, the crews operate in what we call "chain gang fashion"—the first man in and the first man out, and in that sense it is a minimum.

The frequency with which the ratings are changed depends on various conditions—the cutting down of grades and other conditions. It also depends on tonnage conditions. If they do not have the tonnage available, they have to run light.

(1662) Referring again to the figure just below the word "Mogodore"—that applies between Canton and Kent. The reason Canton has a black dot in a circle is because it is a destination as well as a locomotive rating terminal.

At the left-hand side of the page I have shown the average for one mile of road of the locomotive performance. It shows, for illustration, to Cleveland, the first item in the tabulation, the average tons per train, the average tractive power of the locomotive required to haul that tonnage, and the average pounds of tractive power required to haul one ton.

I am asked to explain what the first figure is in the item to Cleveland via the Wheeling & Lake Erie direct, train [fol. 1860] tonnage 5,825, tractive power 89,650 pounds, tractive power required to haul one gross ton (pounds) 15.39. The first figure is the average tonnage handled over the entire route in the average train between the junction points shown and from the point of origin to the destination.

(1663) On page 2, in the first block is shown the route of the W. & L. E. Railroad, by divisions, from Dillonvale, Ohio to Cleveland, Ohio, and the figure of 5,825 is the average train from Dillonvale to Cleveland. That is the last figure in the first block in column 1. The Wheeling route to Cleveland is broken up in various divisions, as shown, from Dillonvale to Rexford. (1664) The second rating district is from Rexford to Brewster; Brewster to Canton, with reference there to the doubling service into Canton of two miles; Canton to Kent, and Kent to Cleveland. That takes you from Dillonvale to Cleveland.

The elements of service in each of those train rating districts are shown in the six columns to the right. They are all drawn into the average based on mileage, tonnage and tractive effort. The figures in the first item of the tabulation on page 1 are taken from the bottom of the first block of the computation on sheet 2.

(1665) Pine Valley, from which Mr. Durham started his study of the cost of the movement from Ohio No. 8 to Cleveland, and Dillonvale are very close together. There was no particular reason for my picking Dillonvale, except that I took the maximum average ratings shown in the time table.

[fol. 1861] The figure 5,825 in column fifth from the left, on page 2, is not a theoretical train load, based on tractive effort, but is the actual train load between Dillonvale and Cleveland (1666) when trains are given their ordinary everyday rating.

The same tabulation is made to every destination (1667) via every route. On page 2 of the exhibit is shown a mathematical process followed in arriving at those average figures. Referring to the first block on page 2, dealing with Ohio No. 8 via the W. & L. E. Railroad to Cleveland, there are shown the various steps in the process.

On page 2 of the exhibit is shown a mathematical process followed in arriving at the average figures in the table on page 1 of this exhibit. Referring to the first block on page 2, dealing with the Ohio No. 8 via the W. & L. E. Railroad to Cleveland, there are shown the various steps in the process. As an illustration (1668), from Dillonvale, Ohio, and Rexford, Ohio, the distance is 15 miles. The train tonnage over that division is 3500 tons. The tonnage rating miles is obtained by multiplying 3500 tons by 15 miles,

which produces 52,500 tonnage rating miles. The tractive power of the locomotives is shown as 88,382 pounds. The tractive power is a mathematical computation, determined by the cylinder area, the steam pressure and the size of the driving wheels. In this instance I got that from the Wheel- [fol. 1862] ing & Lake Erie. I did not make the computation of tractive power in any instance. I took what the railroads gave me. The information comes with the engines.

The tractive power of the locomotives is shown as 88,382 pounds.

(1669) The tractive power miles is the result of multiplying the tractive power by the miles, and in the last column the average pounds of tractive power required to haul one gross ton one mile is the result of dividing the total tractive power miles by the total tonnage rating miles.

These various computations are added for the route from Dillonvale to Cleveland in order to get the total number of miles of locomotive service, the total tonnage rating miles, and the total tractive power miles. To arrive at the average tonnage rating over the entire route, the total tonnage rating miles are divided by the total distance. To obtain the average tractive power of the locomotives, the total tractive power miles are divided by the total distance. To obtain the average pounds of tractive power required to haul one gross ton one mile, the total tractive power miles are divided by the total tonnage rating miles. The same method has been followed throughout all of the exhibits which are to follow dealing with locomotive performance. [fol. 1863] In the interest of economy of time, I have refrained from duplicating the mathematical processes wherever possible. As an illustration referring to the second block on page 2 of Exhibit 255, Dillonvale to Lorain, I have shown in the first item the performance from Dillonvale to Brewster of 63.7 miles. This is the combination of the first two items in the preceding example of Dillonvale to Rexford, and Rexford to Brewster (1670), and this system has been followed throughout all of the locomotive performance charts.

As a further illustration, dealing with the last item on page 2 of Exhibit 255, Dillonvale to Rocky River, I have shown the performance, Dillonvale to Cleveland, for 139.4 miles, the first average on the sheet, and have added to that

the performance of the Nickel Plate Railroad from Cleveland to Rocky River.

In the last block shown on sheet 2, W. & L. E., Dillonvale to Cleveland, 139.4, and so forth, that is taken intact from the bottom of the first block at the top. The mathematical computation producing the first line of figures in the last block on the exhibit will be found in the first block on the exhibit. In other words, I have just built it up step by step, and wherever I have occasion to use that item I simply use the result.

[fol. 1864] Page 3 is a continuation of page 2 and shows the details to points not covered by page 2. The tabulation on page 1 (1671) at the left-hand side of the sketch of the railroads is a summary of the information shown on pages 2 and 3. There will be introduced following the locomotive performance charts an exhibit showing the details of all of the locomotives in service, also an exhibit explaining the symbols used on the charts and the mathematical processes followed in arriving at the final figures.

The tonnage ratings, for instance from Dillonvale to Rexford, 3,500, is not an average: it is the rating for that particular division for that particular type of locomotive. That is the type of loco used for handling dead freight on that division or heavily loaded trains. That is true throughout the exhibit.

(1672) In my locomotive performance charts, for Ohio No. 8, Pittsburgh, Connellsville and Fairmont I have endeavored to use the short tariff routes to all the Ohio No. 8 destinations which we have selected, and I have pretty throughly covered the entire field. Now, it may be that there may not be a complete chart of some particular route, but all the elements are shown in my exhibits, and practically any kind of route can be constructed.

[fol. 1865] In this particular exhibit, No. 255, I have shown the Wheeling and Lake Erie routes to Canton, Orrville, Akron, Cleveland, Rocky River, Lorain and Huron. That is the Wheeling direct and its connection, the A. C. & Y. to Akron. I have also shown the route via the Wheeling, Valley Junction and B. & O. Railroad, and the same information is shown from the Pittsburgh & West Virginia mines in Ohio No. 8.

It is pointed out that the first sheet of my exhibit 255 shows a route to Cleveland via the W. & L. E. and the B. &

O. and, under my tractive power heading, the figures 16.36; whereas to Cleveland via the Pittsburgh & West Virginia, Wheeling & Lake Erie and B. & O. I show (1673) a tractive power of 15.07, and I am asked whether coal actually moves, to my knowledge, over the two routes shown, or all of the routes also. The routes are all in the tariff. I cannot testify as to the extent of the movement.

(Exhibit 255, Witness Ackerman, received in evidence.)

(1674) My next locomotive chart is Key No. CBA-5a, Exhibit 256, consisting of three pages. It shows the routes of the Baltimore & Ohio Railroad and connections from the No. 8 and Cambridge groups to the northeastern Ohio destinations already referred to. It is prepared in exactly the [fol. 1866] same way as the preceding exhibit and shows the final figures for each complete route on the first page. All of the basic data and supporting information is shown on pages 2 and 3.

(Exhibit 256, Witness Ackerman, received.)

These are tariff routes; that is from Ohio No. 8. From Cambridge they are (1675) taken from two of the other exhibits showing the short routes from the Cambridge group, exhibits Nos. 248 and 249. There might be a difference in the miles of locomotive service from the assembling point to destination because the routes I have used on these exhibits are not tariff distances; they are operating department distances. (1677) They are all routes over which the traffic moves.

As to whether the traffic may come from some other point and move over these particular routes and that in that case I have used the tonnage which is actually moving over a particular section of line which may not be embraced in the routes from the origins which I have selected, I do not know of any case where that situation might exist, except possibly from Canton, where we use the Pennsylvania route, which moves coal traffic over that route.

(1678) My next exhibit is Key No. CBA 5b, Exhibit No. 257, consisting of three pages. It shows the routes of the Pennsylvania Railroad from the No. 8 and Cambridge districts to the northeastern Ohio destinations and is made up in the manner already explained.

[fol. 1867] (Exhibit 257, Witness Ackerman, received in evidence.)

In this case I have used the route of the Pennsylvania Railroad over the actual route of the movement. All of these various routes will be drawn together in one final average.

I am asked whether the Cambridge routes used on this exhibit are subject to the same explanation as those used on the preceding exhibit. They are the tariff routes of the movement shown on my map, exhibit 248, and the section of line which has been substituted it shown on the preceding exhibit, No. 256, and all of these routes are drawn together in the final average.

I am asked whether the Cambridge routes used on this exhibit are subject to the same explanation as those used on the preceding exhibit. They are the tariff routes of the movement shown on my map, exhibit 248, and the section of line which has been substituted is shown on the preceding exhibit, No. 256, and all of these routes are drawn together in the final average.

As an illustration, we show the route of the Pennsylvania here on exhibit 257 from Cambridge to Dover. Now, referring to exhibit 256, the route from Dover on into Cleveland over the B. & O. is shown.

(1679) My exhibit 248 shows the Pennsylvania routes from Cambridge to the northeastern Ohio destinations which I discarded, and for which I substituted reasonable [fol. 1868] routes. On Exhibit 257, taking Cleveland as illustrative, I have employed the tariff route from Cambridge; but the route which I have constructed on Exhibit 248—that section beyond Dover—is shown in the preceding exhibit, No. 256.

(1680) It is pointed out that on this exhibit, from Cleveland to Huron I show two locomotives with two different ratings and I am asked how one can determine from my computations which I used. In that case I was comparing Ohio No. 8 with the Illinois and interstate distances and in that instance I have used the locomotive which is the less efficient of the two. So that I have resolved the element of doubt, whatever there may be, against No. 8.

On Sheet 3 of this exhibit the heading over the first two blocks is incorrect. It should be "Canton to Massillon. The destination in the first block should be Massillon and

that in the second block Orrville. They have just been transposed.

My next exhibt, CBA 5c, Exhibit No. 258, shows the (1681) New York Central routes from the No. 8 district to the northeastern Ohio destinations.

(Exhibit 258, Witness Ackerman, received in evidence.)

That completes my No. 8 and Cambridge locomotive performance exhibits. The remaining locomotive performance [fol. 1869] charts in the present set deal with routes in the Indiana-Illinois territory already referred to.

Key No. CBA 5d, Exhibit 259, shows the routes of the Pennsylvania Railroad and connections from the Brazil-Clinton and Linton-Sullivan groups in Indiana to destinations in Illinois in the territory involved in No. 23130 and No. 23922. It consists of two pages of locomotive charts and three pages of supporting data, five pages in all.

(Exhibit No. 259, Witness Ackerman, received in evidence.)

My Key No. C. B. A. 5e, Exhibit No. 260, shows the routes of the Evansville, Indianapolis & Terre Haute, Cleveland, Cincinnati, Chicago & St. Louis, and the Chicago & Eastern Illinois, from the Princeton, Linton-Sullivan, and Brazil-Clinton groups in Indiana to destinations on the Big Four Railroad (1682) in Illinois in the territory involved in No. 23130 and No. 23922. It consists of three pages.

(Exhibit No. 260, Witness Ackerman, received in evidence.)

My Key No. C. B. A. 5f, Exhibit 261, shows the routes of the Baltimore & Ohio Railroad and connections from the Brazil-Clinton, Linton-Sullivan, and Princeton groups in Indiana to destinations on the Baltimore & Ohio in Illinois [fol. 1870] in the territory covered by the two cases already referred to.

(Exhibit 261, Witness Ackerman, received in evidence.)

My Key No. C. B. A. 5g, Exhibit 262, covers the routes of the New York, Chicago & St. Louis Railroad and connections from the Brazil-Clinton and Linton-Sullivan groups

in Indiana to destinations on the New York, Chicago & St. Louis Railway in the destination territory involved in No. 23922.

(Exhibit 262, Witness Ackerman, received in evidence.)

My attention is directed to exhibits 260 and 261, in connections with which I have said that the destinations were included in I. C. C. 23130 as well as 23922. Exhibit 262 applies only to the territory involved in 23922. The (1683) Nickel Plate does not reach any of the points, so far as I know, involved in 23130.

In the other exhibits I have attempted to cover the general territory involved in 23130 as well as 23922.

Key No. CBA 5h, Exhibit 263, shows the routes of the Illinois Central and connections from the Evansville, Linton-Sullivan, Booneville, and Princeton groups in Indiana to destinations on the Illinois Central in Illinois in the territory involved in No. 23130.

(Exhibit 263, Witness Ackerman, received in evidence.)

[fol. 1871] Only Key No. C. B. A. 5i, Exhibit 264, shows the routes of the Illinois Central from the Centralia-Du Quoin and Southern Illinois and Springfield groups to destinations on the Illinois Central Railroad involved in No. 23130.

(Exhibit 264, Witness Ackerman, received in evidence.)

Key No. C. B. A. 5j, Exhibit 265, shows the routes of the New York (1684) Central Railroad (Big Four) from southern Illinois to points in Illinois in No. 23130.

(Exhibit 265, Witness Ackerman, received in evidence.)

That completes my Ohio and Indiana-Illinois locomotive performance charts.

[fol. 1872] (1685) In my next two exhibits, Key Nos. C. B. A. 7 and C. B. A. 7a, Exhibits 266 and 267, I have drawn the Ohio locomotive performance figures together into a single figure representing the operating conditions from the No. 8 and Cambridge districts via all of the routes studied to all of the destinations, and I have similarly drawn together the Indiana-Illinois figures so as to make one figure representing the conditions from all of the Indiana-Illinois origin groups via all of the routes studied to all of the destinations covered in the territory involved in No. 23130 and No. 23922.

(Exhibits 266 and 267, Witness Ackerman, received in evidence.)

(1686) Exhibit 266 deals with the Ohio situation from Ohio No. 8 and Cambridge to the eight Ohio destinations and shows that 15.92 pounds of tractive effort are required to haul one ton one mile in that territory.

Exhibit 267 deals with the Indiana-Illinois section and shows that 16.16 pounds of tractive effort are required to haul one ton one mile in that territory.

Mathematical process is shown on the exhibits and is the same as that used in making a single figure for each route. The tonnage rating miles of all of the train rating districts are added together in a grand total as shown in Column D. The tractive power miles of all of the train rating districts are added together in another grand total [fol. 1873] as shown in Column F. The Column D total is then divided into the Column F total to get the grand average tractive power required to haul one gross ton one mile per mile of line.

On Exhibit 266 each train rating district in Ohio studied by me appears once, and every train rating district studied by me in Ohio appears, each one once. The same is true (1687) of all of the train rating districts studied by me in the Indiana-Illinois territory on Exhibit 267.

My next exhibit is Key No. C. B. A. 5k, Exhibit No. 268, which shows the last available traffic density figures for Ohio, Indiana and Michigan, on the one hand, compared with Illinois on the other. The exhibit also shows the traffic density in southern Virginia, Kentucky and Tennessee for use in connection with a portion of my evidence which will come later. The heading of the third column from the right of this exhibit, "Virginia Southern" is taken from the Commission's report, and means Southern Virginia.

(Exhibit 268, Witness Ackerman, received in evidence.)

That is a division of Virginia made by the Interstate Commerce Commission. It takes in the Stonega fields. Just where the division is, I cannot tell you. (1688) There are other coal fields. It would take in any fields in the [fol. 1874] southern part. I cannot say whether Stonega is the only coal field taken in in southern Virginia.

My exhibit 268 takes in the period for the year 1927. The date on the statement, November 22, 1927, was the

date of the order of the Interstate Commerce Commission calling for this information. The information was not compiled until later. I know of no corresponding information for a later year.

(1689) My next series of exhibits shows the average distance from each of the interstate origin districts to the eight northeastern Ohio destinations already referred to. These average distances are computed by the use of the formula explained in connection with the Ohio average distances, namely, the short tariff routes, not unduly circuitous, from all mines in the group, taking the going rate.

The source of the information regarding the mines, with one or two exceptions, which will be explained, is the publication of the individual railroad, in which it shows the names of the mines, their location, and the ownership, and in every instance they are current publications.

(Exhibit 268, Witness Ackerman, received in evidence.)

In these exhibits I did not use the Kern active mine lists, but the current issues of the railroad showing all of the mines located on their lines. Later on I will indicate how [fol. 1875] much variation, if any, would have resulted from the use of the Kern's lists.

(1691) In selecting the routes which I used in making these interstate average distances, having first located the origin territory I consulted the junction point map of the railroads and endeavored to trace out the short routes from that map. Having done that, I compared it with the tariff to find whether that was a tariff route. So that my first process was to select the shortest reasonable route I could find and then look in the tariff to see if it was in the tariff. I have not excluded any tariff routes, because I found no case where the short reasonable route selected by me was not published in the tariff. If any cases should develop, I recognize that the reasonable route should be given precedence over the tariff route if the former is shorter, but I found no such cases. (1692) The principle I applied was the same as the principle I applied in the Cambridge District.

The first one of these interstate distance exhibits is Key No. C. B. A. 105, Exhibit 269, consisting of one page. It shows the average distances from Pittsburgh & West Virginia Railway mines in the Pittsburgh district to north-

eastern Ohio destinations. The term "short line" in this [fol. 1876] heading and in the headings of all of the subsequent distance exhibits means "short tariff route." The list of mines used is shown on the face of the exhibit and the authority therefor. The routing and the distances to and from junction points are shown. This is true of all of these distance exhibits. They all carry the necessary information on their face to permit the results to be checked.

The tabulation in the center of the exhibit shows the mine list of the Pittsburgh & West Virginia Railroad. The distances are the distances to their gateway with the Wheeling & Lake Erie Railroad, namely, Pittsburgh Junction, and the average (1693) distance is shown as 39.4, to which the distances beyond are added. The distances beyond appear in the third column from the right in the upper block, and they are added to the figure 39.4 to get the total distances in the right-hand column. Those are the distances to the eight northeastern Ohio destinations from Pittsburgh & West Virginia mines in the Pittsburgh group.

(Exhibit 269, Witness Ackerman, received in evidence.)

Key No. C. B. A. 105 e, Exhibit No. 270, one page, shows (1694) the average distances from mines on the Pennsylvania Railroad in the Pittsburgh District to northeastern Ohio destinations. The list of mines shown on this exhibit [fol. 1877] was furnished to me by the Coal Department of the Pennsylvania Railroad Company at Chicago. It was in mimeographed form. It is interesting to note that the distance shown on this exhibit, namely, 164.2 miles to Cleveland, is practically the same as Mr. Kern's average distance from the active mines on the Pennsylvania Railroad in the Pittsburgh district, which is 165.4 miles, as shown by his Exhibit 40, as both of these figures fall within the same mileage block of the 23922 scale, there seems to be no important difference between my mine list and Mr. Kern's.

(Exhibit 270, Witness Ackerman, received in evidence.)

Key No. C. B. A. 105 e, Exhibit No. 271, shows the average distances from mines on the Pittsburgh & Lake Erie Railroad in the Pittsburgh district to the northeastern Ohio destinations. The authority for the mine list which appears on the face of the exhibit is P. & L. E. Tariff I. C. C. No. 2983.

(Exhibit 271, Witness Ackerman, received in evidence.)

Key No. C. B. A. 105 a, Exhibit 272, shows the average distances from the Baltimore & Ohio Railroad mines in the Pittsburgh group to northeastern Ohio destinations. The mine list is taken from their circular N. S. 100, (1695) issued by their accounting department.

[fol. 1878] (Exhibit 272, Witness Ackerman, received in evidence.)

Throughout this series of exhibits, I endeavored to compute the distances from the mines, rather than from the stations at which the mines are located. In the case of the B. & O., their N. S. 100 shows the distances from the mines for the Ohio fields. Generally in the eastern fields the tariff of the B. & O. Railroad shows the distances from the mines themselves.

With the Pennsylvania I used the distances from the mines shown in their C. T. 1,000, which is an operating department publication, and shows the distances of all of their railroad facilities.

From the C. & O., I used a publication of the C. & O. Railroad issued by the Car Distributing Department, which shows (1696) the distance from the tipples, and I checked that with the tariffs and find that practically they are the same, with a very slight difference of a fraction of a mile occasionally.

The L. & N. Railroad apparently has a mine station for every mine and the distances are from the mine stations.

On the N. & W. Railroad I used the distance from the stations, that being all I had and all I could secure. The same is true of the Southern Railroad.

[fol. 1879] The chart of the Baltimore & Ohio in connection with exhibit 272 is a photographic copy of a blue print of the Engineering Department of the B. & O. Railroad. It shows the exact location of every mine.

With reference to the Norfolk & Western Railroad, there we used the mine station as distinguished from the mine itself. I was unable to secure from the Norfolk & Western a publication showing the actual distance from the mine tipple, either at the Chicago office (1698) or any other place.

In connection with the information for the Pennsylvania, I secured that from the coal agent in the Chicago office, whose name I do not recall.

(1700) Key No. C. B. A. 105d, Exhibit 273, of one page, shows the average distances from mines on the P. C. & Y. Railway in the Pittsburgh District to northeastern Ohio destinations. The authority for the mine list is shown at the bottom of the exhibit.

(Exhibit 273, Witness Ackerman, received in evidence.)

Key No. C. B. A. 105f, Exhibit 274, of one page, shows the average distances from mines on the Montour Railroad in the Pittsburgh District to northeastern Ohio destinations. The authority for the mine list is shown at the bottom of the page.

(Exhibit 274, Witness Ackerman, received in evidence.)

[fol. 1880] Key No. C. B. A. 105½g, Exhibit No. 275, of (1701) one page, shows the average distances from the mines of the Winfield Railroad in the Pittsburgh District to northeastern Ohio destinations. The authority for the mine list is the Pennsylvania Railroad Tariff from which I was able to ascertain the name of the mine station, coupled with Kern's exhibit, which showed the name of the mine.

(Exhibit 275, Witness Ackerman, received in evidence.)

In connection with Exhibit 274, the route that I show was obtained by me in the manner that I stated a while ago. It appeared to me to be the shortest route from the Montour Railroad. There are tariff authorities shown for the distances shown. We checked every tariff route. Further, I have checked every tariff route here with Kern's short tariff routes.

(1702) Key No. C. B. A. 105½f, Exhibit No. 276, of one page, shows the average distances from mines on the Union Railroad in the Pittsburgh District which are served through switching absorption by the Bessemer & Lake Erie to northeastern Ohio destinations. The authority for the mine list is the circular referred to on the face of the exhibit, as explained by the general freight department of the Bessemer & Lake Erie Railroad. The circular referred to lists all railroad facilities and it is necessary to identify the mines which appear among them. There are four mines and one wharf, making five origins from which coal may be shipped.

[fol. 1881] (Exhibit 276, Witness Ackerman, received in evidence.)

Key No. C. B. A. 105g, Exhibit No. 277, of one page, shows the distances from Baltimore & Ohio mines in the Connellsville district to northeastern Ohio destinations. The authority for the mine list is shown on the face of the exhibit.

(1703) (Exhibit 277, Witness Ackerman, received in evidence.)

Key No. C. B. A. 105h, Exhibit 278, of one page, shows the distances from Pittsburgh & Lake Erie mines in the Connellsville district to northeastern Ohio destinations. The authority for the mine list is shown on the face of the exhibit.

(Exhibit 278, Witness Ackerman, received in evidence.)

Key No. C. B. A. 105i, Exhibit 279, consisting of two sheets, shows the average distances from mines on the Monongahela Railway in the Connellsville group to northeastern Ohio destinations. The authority for the mine list is shown on the face of the exhibit.

(Exhibit 279, Witness Ackerman, received in evidence.)

Key No. C. B. A. 105j, Exhibit No. 280, of one page, shows the average distances from mines on the Pennsylvania Railroad in the Connellsville District to northeastern Ohio destinations. The authority for the mine list is shown on the face of the exhibit.

(Exhibit 280, Witness Ackerman, received in evidence.)

[fol. 1882] Kern's Exhibit 162 in Docket 23240 and 23241 is in the lake cargo case. That is the only list I was able to secure of mines in the Connellsville District on the Pennsylvania Railroad. The Chicago office (1704) had no information on it and the information they furnished was that their mine circular was 15 years old and was obsolete.

Key No. C. B. A. 105k, Exhibit No. 281, consisting of two pages, shows the average distances from mines on the Baltimore and Ohio Railroad in the Fairmont district to northeastern Ohio destinations. The authority for the mine list is shown on the face of the exhibit. It will be noted that the mines are divided into sub-groups.

(Exhibit 281, Witness Ackerman, received in evidence.)

In Note A in the first block, and also the heading of the lower half of the page, the word "Monongahela" should be Monongah.

(1705) Key No. C. B. A. 105l, Exhibit No. 282, of one page, shows the average distances from mines on the Western Maryland Railroad in the Fairmont District to northeastern Ohio destinations. The authority for the mine list appears on the face of the exhibit.

(Exhibit No. 282, Witness Ackerman, received in evidence.)

Key No. C. B. A. 105m, Exhibit 283, shows the average distances from mines on the Monongahela Railway in the Fairmont District to northeastern Ohio destinations. The [fol. 1883] authority for the mine list is shown on the face of the exhibit.

(Exhibit 283, Witness Ackerman, received in evidence.)

Key No. C. B. A. 105 n, Exhibit 284, of one page, shows the average distances from mines on the Chesapeake & Ohio Railway in the Coal River group, which is part of the Kanawha rate district. The authority for the mine list is shown on the face of the exhibit.

(Exhibit 284, Witness Ackerman, received in evidence.)

Key No. C. B. A. 105 o, Exhibit 285, shows the average distances from mines on the C. & O. Railroad in the Big Sandy and Kentucky district to northeastern Ohio destinations. It consists of two pages. The authority for the mine list appears on the face of the exhibit.

(Exhibit 285, Witness Ackerman, received in evidence.)

(1706) Key No. C. B. A. 105 p, Exhibit No. 286, consisting of two pages shows the average distances from points on the C. & O. Railway in the Logan District, which is part of the Kanawha Rate District, to destinations in northeastern Ohio. The authority for the mine list appears on the face of the exhibit.

(Exhibit 286, Witness Ackerman, received in evidence.)

Key No. C. B. A. 105 t, Exhibit No. 287, shows the average distances from mines on the Norfolk & Western Rail-

[fol. 1884] way in the Kenova District to northeastern Ohio destinations. The authority for the mine list is shown on the face of the exhibit.

(Exhibit 287, Witness Ackerman, received in evidence.)

Key No. C. B. A. 105 u, Exhibit No. 288, shows the average distances from mines on the Norfolk & Western Railway in the Thacker District to northeastern Ohio destinations. The authority for the mine list is shown on the face of the exhibit.

(Exhibit 288, Witness Ackerman, received in evidence.)

The last two exhibits, 287 and 288, show the distance of stations on the Norfolk & Western and not from the mines.

(1707) Key No. C. B. A. 105 v, Exhibit No. 289, shows the average distances from points on the Southern Railway and connections in the South Jellico District to northeastern Ohio destinations. The authority for the mine list is shown on the face of the exhibit.

(Exhibit 289, Witness Ackerman, received in evidence.)

Key No. C. B. A. 105 w, Exhibit No. 290, shows average distances from mines on the L. & N. Railway in the McRoberts District to northeastern Ohio destinations. The authority for the mine list is shown on the face of the exhibit.

(Exhibit 290, Witness Ackerman, received in evidence.)

Key No. C. B. A. 105 x, Exhibit No. 291, consisting of two pages, shows average distances from mines on the [fol. 1885] L. & N. Railway in the Harlan-Jellico group to northeastern Ohio destinations. The authority for the mine list is shown on the face of the exhibit.

(Exhibit 291, Witness Ackerman, received in evidence.)

Key No. C. B. A. 105 y, Exhibit No. 292, has a blurred key number. Its title is Statement of Average Short Line Distances from L. & N. Railway Hazard group to northeastern Ohio destinations. The authority for the mine list is shown on the face of the exhibit.

(Exhibit 292, Witness Ackerman, received in evidence.)

(1708) On Exhibit 285, where in connection with routes 1, 2, 3 and 4 I show the N. & W. as the originating carrier,

that was intended to be C. & O. On page two under the heading "Routes" N. & W. should be changed to C. & O.

Exhibit 292 is a statement of average short line distances from L. & N. Railway Hazard group to northeastern Ohio destinations. The authority for the mine list is shown on the face of the exhibit.

Key No. C. B. A. 105 q, Exhibit 293, shows average distances from mines on the C. & O. Railway in the Kanawha group to northeastern Ohio destinations. The authority for the (1709) mine list is shown on the face of the exhibit.

(Exhibit 293, Witness Ackerman, received in evidence.)

Key No. C. B. A. 105 r, Exhibit No. 294, shows average distances from mines of the New York Central Railway in the Kanawha District to northeastern Ohio destinations. [fol. 1886] The authority for the mine list is shown on the face of the exhibit.

(Exhibit 294, Witness Ackerman, received in evidence.)

(1710) Key No. C. B. A. 105½ o, Exhibit 295, shows average distances from mines on the Baltimore & Ohio in the Kanawha district. The mine list used in this exhibit is taken from B. & O. Circular No. N. S. 100. There is a difference between the list used by me, consisting of eight mines as compared with a very much larger number which Mr. Kern uses. The difference is due to the fact that I use only the mines which take the Kanawha rate via the Baltimore & Ohio Railroad, whereas Mr. Kern uses all of the mines that take that rate via any route, regardless of the fact that they may take a lower rate via some other route. I do not consider his list a fair representation of the rate group of the B. & O.

(Exhibit No. 295, Witness Ackerman, received in evidence.)

Key No. C. B. A. 105 z, Exhibit 298, shows average distances from mines on the New York Central Railroad (Nicholas-Fayette and Greenbrier Railway) in the New River district to northeastern Ohio destinations. The authority for the mine list is shown on the face of the exhibit.

(Exhibit No. 296, Witness Ackerman, received in evidence.)

(1711) Key No. C. B. A. 105 aa, Exhibit No. 297, consisting of two pages, shows average distances from mines [fol. 1887] on the Virginian Railroad and connections in the New River district to northeastern Ohio destinations. The authority for the mine list is shown on the face of the exhibit.

(Exhibit No. 297, Witness Ackerman, received in evidence.)

This exhibit shows distances from the stations and not the mines.

Referring to Exhibit 295, the Buffalo Creek and Gauley is not included in the Kanawha group of the Baltimore & Ohio. Via the B. & O. Railroad direct, Buffalo Creek and Gauley take a lower rate than the Kanawha district rate. This exhibit was based upon the track delivery rates. With respect to Middle Creek, the same situation prevails. (1712) You have a little lower level of rate than the regular, recognized Kanawha basis, from those mines, and they are not given the regular Kanawha district rate.

Key No. C. B. A. 105 ab, Exhibit 298, consisting of two pages, shows average distances from mines on the Chesapeake & Ohio Railway in the New River district to northeastern Ohio destinations. The authority for the mine list is shown on the face of the exhibit.

(Exhibit No. 298, Witness Ackerman, received in evidence.)

Key No. C. B. A. 105 s, Exhibit 299, shows average distances from mines on the Norfolk & Western Railway in the Tug River district to northeastern Ohio destinations. The authority for the mine list is shown on the face of [fol. 1888] the exhibit.

(Exhibit No. 299, Witness Ackerman, received in evidence.)

(1713) Key No. C. B. A. 105 ac, Exhibit 300, shows average distances from mines on the Norfolk & Western Railway in the Clinch Valley No. 1 district to northeastern Ohio destinations. The authority for the mine list is shown on the face of the exhibit.

Key No. C. B. A. 105 ad, Exhibit 301, (1714) shows average distances from mines on the Norfolk & Western in the Clinch Valley No. 2 district to northeastern Ohio desti-

nations. The authority for the mine list is shown on the face of the exhibit.

(Exhibit No. 301, Witness Ackerman, received in evidence.)

Key No. C. B. A. 105 ae, Exhibit 302, shows average distances from mines on the Norfolk & Western Railway in the Pocahontas district to the northeastern Ohio destinations. The authority for the mine list is shown on the face of the exhibit.

(Exhibit No. 302, Witness Ackerman, received in evidence.)

Key No. C. B. A. 105 af, Exhibit No. 303, shows average distances from mines on the Southern Railway and connections in the Oakdale district to northeastern Ohio destinations. The authority for the mine list is shown on the [fol. 1889] face of the exhibit.

(Exhibit No. 303, Witness Ackerman, received in evidence.)

Key No. C. B. A. 105 ag, Exhibit 304, shows average distances from mines on the L. & N. Railway in the Stonega district to northeastern Ohio destinations. The authority for the mine list is shown on the face of the exhibit.

(1715) (Exhibit No. 304, Witness Ackerman, received in evidence.)

That completes my exhibits showing distances from origin districts, by railroads.

My next exhibit C. B. A. 105 ah, Exhibit No. 305, is a recapitulation showing all of the distances heretofore shown on the individual exhibits from No. 269 to No. 304, arranged by rate groups and showing a single average figure from each rate group to each of the eight northeastern Ohio destinations.

(Exhibit No. 305, Witness Ackerman, received in evidence.)

In the Cleveland column, the distance from the Pittsburgh district is 166.8 miles; from Connellsville district, 220.7 miles; Fairmont district, 258 miles. In the 239 high volatile southern group, 408.4 miles; low volatile southern

group, 426.4 miles. The corresponding distances to the other destinations are in the same horizontal lines as the [fol. 1890] ones I have read in the different columns.

(1716) The average distances I have just referred to, are shown on my Exhibit 305, are very close to Mr. Kern's active mine list figures. As an illustration, Cleveland, Ohio, using the same roads, the same origin groups that Mr. Kern used, I would get an average of 355.6 miles, and Mr. Kern's average would be 355.3 miles.

Those figures do not correspond with the average shown on the sheet because Mr. Kern made only an incomplete presentation of the distances from the southern groups, but I have used the same roads and the same origin districts that he did, and I get for those roads a difference in distance from the southern high volatile field of 2.3 miles. That comparison reflects the extent of the difference in distance growing out of the difference between my mine list and Mr. Kern's. In all other respects, I have used the same data in getting these figures.

(1717) It is suggested that my Exhibit 305 shows an average of low volatile fields from West Virginia, Virginia and Tennessee under the mileage of 426.4, and in that list are included Clinch Valley No. 2, Oakville and Stonega, which, it is said, are not low volatile fields. Those are all of the districts taking the rate of $2.64. While I know that those three fields mentioned by Mr. McVann produce a high volatile coal, they have always been grouped with the low volatile fields of the south, and they have been referred [fol. 1891] to, somewhat inaccurately, by that descriptive term.

I am asked whether I am fully aware of the distinction between the number of districts included in Mr. Kern's exhibit and those I included; that is, which were complaining districts in Docket 25566 and those which were not. I realize that Mr. Kern has presented the picture only so far as there were complaints pending in this case involving these particular southern districts, but we endeavor to show a full and complete picture of all the (1718) interstate origins.

(1719) From the outer southern group, which we have loosely termed the low volatile group, using the same roads that Mr. Kern uses, he has an average distance to Cleveland of 421.7 miles, and my average distance is 411.1 miles.

I am somewhat lower than he, but the rates would fall in the same block.

From the Pittsburgh district Mr. Kern's list would produce a short line distance of 162.9 miles to Cleveland. My list would produce a distance of 166.8, as shown on my exhibit 305. In other words, Mr. Kern used the district to the same extent that I did. I might add there that we supplemented our original Pittsburgh district by adding the Winfield Railroad, which we did not have in my original set-up, and we checked with Mr. Kern and got approxi-
[fol. 1892] mately the same result.

(1720) From the Connellsville district Mr. Kern shows an average distance of 216.3 miles and my average distance is 220.7 miles.

From the Fairmont district Mr. Kern's average distance is 247 miles and my distance is 258 miles. There I am 11 miles greater than he is, and that would result in a different rate block. With that exception, my figures and the figures computed in the same manner from Mr. Kern's data would produce distances in the same rate block of the extended scale.

1721) The figures I have just given as Mr. Kern's figures do not appear in his exhibit. They are a computation from his exhibit and they are based on the short tariff routes. The difference between his final figures and mine is due to the fact that I use short tariff routes and he uses all tariff routes. I picked out the shortest tariff route in his list to make the check.

(1722) In note A on this exhibit the word Monogahela should again be changed to Monongah. Also, in the second column of the Pittsburgh district, on exhibit 305, P. C. & G. should be P. C. & Y.

In the case of Canton, to get the average of 134.4 miles from the group, we multiply the distance shown there by the number of mines and arrive at the total, and we add the totals together and divide it by the total number of mines.

[fol. 1893] (1723) This process, however, may not be proved from this exhibit in every instance because there are some places where there are no rates from all of the mines, and in that instance we have multiplied by the number of mines from which the rate applies. In the case

of Canton you divide by 159, eliminating the 4 B. & L. E. mines, because they have no rates.

(1725) My next exhibit, Key No. 102, Exhibit No. 306, is an analysis of the 23922 scale, showing an extension of that scale to 600 miles by means of a progression proportioned to the square root of the distance.

(Exhibit 306, Witness Ackerman, received in evidence.)

Column A shows the 23922 scale to 300 miles. Notes a, b and c explain at what points the 23922 scale and companion scale 23130 run out. Column B shows 85 per cent of the Holmes & Hallowell scale for distances from 10 to 600 miles. It will be seen from this column that the 23922 scale is exactly 85 per cent of the Holmes & Hallowell scale up to 70 miles, at which point it becomes progressively lower as the distance increases. Column C is the 23922 scale progressed from block to block in proportion to the square root (1726) of the distance, starting at 80 miles and over 70.

To and including 300 miles it will be noted that a progression based upon the square root of the distance results [fol. 1894] in a rate of just one cent higher than the 23922 scale at 300 miles, at which point the latter scale runs out. It will also be seen that the majority of the rate blocks are exactly the same as the scale and never more than one cent more or less.

Column D is the 23922 scale extended beyond 300 miles in proportion to the progression of the square root of the distance for the extended blocks.

In Column E I have shown the progression in cents for each ten miles in order to determine whether there is any irregularity in this method of extension. This column shows that the progression per ten miles diminishes continuously except for a slight hump in the 300 to 325 mile block where the progression per ten miles is 3.6 cents in comparison with 3.2 for the block immediately preceding and 3.2 for the block immediately following.

Column E shows that the progression in cents per ten (1727) miles for the block 325 and over 300 miles is 3.6, and that is higher than either the next preceding or the next following progression. There is a slight hump there produced by that method of extension.

Column F is the 23922 scale extended beyond 70 miles in proportion to the square root of the distance. The differ-

ence between this column and Column D is that in Column D [fol. 1895] the extension started at 300 miles, whereas in Column F the extension starts at 70 miles, the point where the original scale departs from 85 per cent of the Holmes & Hallowell scale.

By referring to Column G it will be noted that this method of progression results in a continuously declining rate of progression for each ten miles without any hump of the kind disclosed by Column E.

Column H is our suggested extension of the 23922 scale. It consists of the scale as prescribed up to 300 miles plus the extension shown in Column F for the distances 300 to 600 miles, inclusive.

(1728) Column I shows the rate of progression in cents per ten miles for the entire scale from 10 miles to 600 miles, extended as shown in Column H. It will be noticed that this method of extension produces a gradual decline in the rate of progression without any humps or other inconsistencies.

Columns J and K are simply for information. They show the Holmes & Hallowell scale and the percentage of that scale resulting from the extended 23922 scale shown in Column H.

My next exhibit, Key No. 104, Exhibit No. 307, deals with the distance scales prescribed by the Commission for low-grade commodities and shows the rate of progres- [fol. 1896] sion compared with a progression based on the square root of the distances. An examination of these various scales will show that the variation in the progression as compared with the progression on the square root of the distance is very slight. It seems to indicate that this is a customary manner of constructing scales on commodities of this general character. The scales included in the exhibit apply to cottonseed cake and meal; sand, gravel and crushed rock; sand and gravel; lime; slag; logs, and bituminous coal.

(1729) The last column, on page 6 of this exhibit, is a variation of the scale from the square root progression. It shows that in the majority of cases there is no variation from the square root progession of the distance. The variation, where it is shown, is half a cent for those dis-

tances shown, and that is a uniform departure from the scale. All the pages are made up in the same way.

The log scale on page 10 shows that, after 20 miles, the scale is exactly on the square root of the progression.

Page 4 shows that, except for the last block in the scale, there is no variation in the progression of the scale from the progression of the distance on the square root method: [fol. 1897] The last scale in the exhibit is the 23922 scale, shown on page 13.

(1730) My next exhibit, C. B. A. 106, Exhibit No. 308, shows the average distance and rate from the various interstate origin groups to the northeastern Ohio destinations compared with rates resulting from the extended scale for corresponding distances. In the case of the Fairmont rates to Massillon, Orrville and Huron, the present rate shown is an average of the varying rates from different parts of the districts. Except for these, the same rate applies from all of each district to each individual destination.

(Exhibit 308, Witness Ackerman, received in evidence.)

I am asked what the effect would be of applying the scale to Cleveland, shown just to the right of the middle of Exhibit 308.

From the Pittsburgh group the present rate of $1.84 would be reduced to $1.65; from Connellsville the present rate of $1.90 would be reduced to $1.85; from the Fairmont group the present rate of $1.99 would be increased to $2.02; from the high volatile fields of West Virginia, eastern Kentucky and Tennessee, the present rate of $2.39 would be increased to $2.49. From the low volatile fields of West Virginia, Virginia, and Tennessee, including also the high volative groups in those fields taking the $2.64 [fol. 1898] rate, the present rate would be reduced to $2.58.

That application of the scale leaves the rate blankets to Cleveland in exactly the same form they are now in. That is based on the average distance from all the existing blankets.

(1731) My next series of exhibits is a set of locomotive charts covering the short-line tariff routes from the interstate origin districts to northeastern Ohio destinations. In the case of Pittsburgh, Connellsville and Fairmont, all of the northeastern Ohio destinations are shown. In the case

of the southern crescent districts, only Cleveland is shown, because the routes are sufficiently long so that the variation in the result to the other destinations would be negligible. All of these exhibits are prepared in exactly the same manner as the Ohio and Indiana-Illinois locomotive performance charts and require no further explanation.

C. B. A. 101, Exhibit No. 309, shows the routes of the Pittsburgh & West Virginia Railway from the Pittsburgh district.

(Exhibit 309, Witness Ackerman, received in evidence.)

C. B. A. 101a, Exhibit 310, shows the routes of the Baltimore & Ohio Railroad from the Pittsburgh District.

(1732) (Exhibit 310, Witness Ackerman, received in evidence.)

[fol. 1899] C. B. A. 101b, Exhibit 311, shows the routes of the Pittsburgh & Lake Erie from the Pittsburgh and Connellsville Districts.

(Exhibit 311, Witness Ackerman, received in evidence.)

C. B. A. 101c, Exhibit 312, shows the routes of the Pennsylvania Railroad from the Pittsburgh, Fairmont and Connellsville Districts.

(Exhibit 312, Witness Ackerman, received in evidence.)

C. B. A. 101d, Exhibit 313, shows the Baltimore & Ohio routes from the Fairmont and Connellsville Districts.

(Exhibit 313, Witness Ackerman, received in evidence.)

C. B. A. 101e, Exhibit 314, shows the New York Central routes from the Kanawha District.

(Exhibit 314, Witness Ackerman, received in evidence.)

C. B. A. 101f, Exhibit 315, of two pages, shows the Chesapeake & Ohio routes from the Kanawha, Coal River, Logan and Big Sandy Districts.

(Exhibit 315, Witness Ackerman, received in evidence.)

This was prepared from one of the Chesapeake & Ohio exhibits in the Lake Cargo case, with a change in the type of locomotive in use between Russell and Columbus and a modification of the routing beyond Columbus to apply

(1733) to Cleveland as a destination. Everything else on the chart is exactly as shown by the Chesapeake & Ohio in the Lake Cargo case.

[fol. 1900] C. B. A. 101g, Exhibit 316, shows the Norfolk & Western routes from the Kenova-Thacker District to Cleveland. This was likewise prepared from a similar chart offered by the Norfolk & Western in the Lake Cargo case, with an appropriate change in the routing beyond Columbus to reach Cleveland as a destination.

(Exhibit 316, Witness Ackerman, received in evidence.)

C. B. A. 101h, Exhibit 317, shows the routes of the Louisville & Nashville from the Harlan, Hazard, McRoberts and Jellico Districts.

(Exhibit 317, Witness Ackerman, received in evidence.)

C. B. A. 101i, Exhibit 318, shows the routes of (1734) the Southern Railway and short line connections from the South Jellico District.

(Exhibit 318, Witness Ackerman, received in evidence.)

C. B. A. 101j, Exhibit 319, shows the routes of the Chesapeake & Ohio from the New River District. This is prepared from a Chesapeake & Ohio exhibit offered in the Lake case, with a change in the locomotive in service from Russell to Columbus and a change in the routing beyond Columbus to reach Cleveland as a destination.

Referring back to Exhibits 317 and 318, I am asked whether those charts are original in this case, and without application to anything in the Lake Cargo case.

[fol. 1901] If you mean original in the sense that I have used them, yes. They are similar to charts which I drew in the Lake Cargo case and were checked and verified by information shown by the Louisville & Nashville in that case, with a change in the situation beyond Cincinnati to reach Cleveland. They are not based on anything which the carriers put in in the Lake Cargo case.

(1736) C. B. A. 101 k, Exhibit 320, shows the Virginian Railway routes from the Pocahontas and New River districts. It consists of only one sheet and shows the mathematical formula on the face of the chart.

(Exhibit 320, Witness Ackerman, received in evidence.)

C. B. A. 101 l, Exhibit 321, shows the routes of the Norfolk and Western from the Pocahontas, Tug River, and Clinch Valley districts. This is prepared from a Norfolk and Western exhibit in the Lake Cargo case and the chart is exactly the same as shown by the Norfolk and Western in that case, except for the change in the routing beyond Columbus in order to reach Cleveland as a destination.

(Exhibit 321, Witness Ackerman, received in evidence.)

C. B. A. 101 m, Exhibit 322, shows the routes of the Louisville & Nashville from the Stonega district.

(Exhibit 322, Witness Ackerman, received in evidence.)

[fol. 1902] C. B. A. 101 n, Exhibit 323, shows the routes of the Southern Railway from the Oakdale district.

(Exhibit 323, Witness Ackerman, received in evidence.)

This completes the Interstate Locomotive Performance charts.

The next exhibit, Exhibit No. 324, which carries no key numbers, is an explanation of the reference marks used on the locomotive performance charts, and a statement of the (1737) mathematical formula used to ascertain the average locomotive performance one mile per mile of road. The formula appears at the bottom under the heading "Method used to ascertain," etc. The rest of the exhibit is simply an index of the symbols.

(Exhibit 324, Witness Ackerman, received in evidence.)

The next exhibit, No. 325, shows the railroad, class of locomotive, type of locomotive, weight on drivers, and tractive power of all the locomotives used in the locomotive performance charts. This information was obtained from the blueprints of the locomotives on file in various roundhouses and mechanical departments of these various railroads.

(Exhibit 325, Witness Ackerman, received in evidence.)

(1738) My next series of exhibits shows the average locomotive performance from each of the interstate dis-[fol. 1903] tricts to the northeastern Ohio destinations covered by the locomotive performance charts and reduces all of the locomotive performance studies to a single figure for each interstate origin district.

C. B. A. 100bb, Exhibit 326, covers the Pittsburgh district and shows an average locomotive performance figure for the entire district to the eight northeastern Ohio destinations of 16.05 pounds.

(Exhibit 326, Witness Ackerman, received in evidence.)

(1739) C. B. A. 101 cd, Exhibit 327, covers the Connellsville district and shows a single figure from that district to the eight northeastern Ohio destinations of 15.90 pounds.

(Exhibit 327, Witness Ackerman, received in evidence.)

C. B. A. 101 cc, Exhibit 328, covers the Fairmont district and shows a single figure to the eight northeastern Ohio destinations of 16.96 pounds.

(Exhibit 328, Witness Ackerman, received in evidence.)

C. B. A. 101 ii, Exhibit 329, covers the $2.34 origin district in southern West Virginia, eastern Kentucky and eastern Tennessee and shows a single figure to Cleveland of 12.90 pounds.

(Exhibit 329, Witness Ackerman, received in evidence.)

[fol. 1904] C. B. A. 101 nn, Exhibit 330, covers the $2.64 origin districts and shows a single figure to Cleveland of 13.84 pounds.

(Exhibit 330, Witness Ackerman, received in evidence.)

(1740) My next exhibit is an exhibit in which I have shown from Ohio No. 8 and Cambridge and all of the interstate origin groups the average rate to the northeastern Ohio destinations, the average distance, the tractive power required to haul one ton one mile from those districts, total pounds of tractive power required to haul one ton from the origin fields to the Ohio destinations, and the total pounds of tractive power expended to earn $1 at the existing rates. By "existing rates" I mean the reduced rates under investigation in Ohio and the existing interstate rates, except that I did not make the reduction of the P. & W. V. from Pittsburgh.

Mr. M. Carter Hall calls my attention to the fact that in connection with Exhibit 329, he does not recall seeing a chart covering the Southern Railway from Oneida, Tennessee to Cincinnati as part of the high volatile field. That is

the South Jellico group and Oneida is a point of Origin. It is covered by Exhibit No. 318 (1741). This is not the first time I have ever heard of grouping South Jellico with Kanawha, Kenova and Thacker. I have done that before. I did it in the Lake Cargo Case.

The average rate to northeastern Ohio is shown on Exhibit No. 331.

(1742) The last column to the right shows the excess expenditure of energy from the interstate origin groups to the northeastern Ohio destinations over the expenditure from the Ohio No. 8 and Cambridge fields per $1 of present rate.

(Exhibit 331, Witness Ackerman, received in evidence.)

The figures in the last column are per cents, and should be so marked. This exhibit shows that the excess of the [fol. 1905] interstate origin groups over the Ohio No. 8 and Cambridge ranges from 5.6 per cent as a minimum to 65.3 per cent as a maximum. These percentages measure the amount of locomotive effort necessary to earn a dollar under the existing rates.

(1743) This exhibit sums up in one final figure from each of the groups the average distance, the average rate, the tractive power required to move the traffic one mile per mile of road, the total pounds of tractive power required to haul one ton from the various origins to the destinations and the tractive power pounds necessary to earn one dollar under the present rate. It, therefore, reflects in one showing relative rate levels, distances, and transportation conditions and shows that under the present rate structure the traffic from Ohio No. 8 and Cambridge is yielding to the carriers for the service performed greater revenue than the traffic from any of the interstate districts, and that the present Ohio rates are relatively higher than the rates from any of the interstate districts.

That brings to an end my locomotive performance and distance study.

My next exhibit deals with another subject. C. B. A. [fol. 1906] 108, Exhibit 332, shows the average distance from Ohio No. 8 and Cambridge and all interstate origin groups to Cleveland, Ohio, the rate from those origin groups, and the ton-mile revenue which those rates yield after deducting arbitrary terminal factors of 30 and 60

cents. This exhibit shows that the present rates (1744) from Ohio No. 8 and Cambridge are relatively higher than the present rates from any of the interstate origin groups except Pittsburgh.

(Exhibit 332, Witness Ackerman, received in evidence.)

In the Pittsburgh block which you indicate, I deal with the reduced rate of the P. & W. V. separately from the unreduced rate of the other railroads.

The Pittsburgh average figure of 9.23 mills with the 30-cent deduction and 7.43 mills with the 60-cent deduction are based on the $1.84 rate. They did not take into account the reduced rates of the P. & W. V.

[fol. 1907] Cross-examination.

By Mr. Orcutt:

(1745) On my Exhibit 325 I show the details of the locomotives used. I do not show any details for the locomotives of the Monongahela Railroad. Yet, I am reminded, on Exhibit 312 I have used their engines in my computation. That is an oversight. I will remedy that deficiency.

By Mr. Bull:

On my Exhibit 331, the average distances which I have shown are calculated from the exhibits which I have put in showing distances.

By Mr. Keeler:

I am asked which of my exhibits covering my tractive effort charts covers the route of the Monongahela Railway and the P. & L. E. I do not know, without looking it up, whether I have separated it in that form; but it is all contained in the average. It may be true that that route is not shown on my exhibit 312, which shows the route of the Monongahela and the P. R. R.—the details are all shown on the average sheet which sums it all up. The performance to Brownsville Junction is (1746) the same whether it moves over the P. R. R. beyond or not. I have not made a separate average, but it can be easily constructed from the data there, and it appears in the locomotive charts which sum up the performance for each district with the same amount of weight as if it had been shown

against the P. & L. E. Railroad, because I have shown in the summing up charts one railroad only once.

[fol. 1908] Testimony Taken at Washington, D. C., January 11, 1933

Direct examination of C. B. Ackerman (continued).

By Mr. Ballard:

(1748) I am asked to refer to my Exhibit 256 and to state with respect to each destination which I used the short tariff route from the Cambridge District or the substituted reasonable route shown on my Exhibit 249.

To Cleveland, I used the substituted route via the Pennsylvania Railroad to Dover and the B. & O. Railroad. To Rocky River, I used the same substituted route as far as Cleveland, and beyond, the regular route. To Akron and Canton, I used the substituted route, Pennsylvania Railroad to Dover, thence the B. & O. To Massillon, I used the substituted route of the Pennsylvania Railroad to Dover, thence B. & O. beyond. To Orrville, I have used the substituted route of the Pennsylvania Railroad to Dover, B. & O. to Justus and Wheeling & Lake Erie beyond. To Lorain I have used the substituted route of the Pennsylvania Railroad to Dover and B. & O. beyond. To Huron, I have used the same substituted route as to Lorain, with the necessary modification beyond Elyria.

In other words, every route from Cambridge District shown on my Exhibit 256 is a reasonable route taken from Exhibit 249, in place of a circuitous short tariff route.

[fol. 1909] All of the routes shown on my Exhibit 257 are short tariff routes. The train rating districts making up the substituted reasonable routes from Cambridge via the Pennsylvania Railroad are shown on Exhibit 256, and these enter into the grand average figure for Ohio.

(1749) On the later exhibits which I introduced yesterday, certain exhibit numbers are to be inserted in the blanks for cross-reference purposes. I think the insertions have been made on Exhibits 266 and 267.

Referring to Exhibit 325, in the blank space in the heading there should be inserted "255 to 265, inclusive" and "309 to 323, inclusive".

Exhibit 326: There should be inserted "309 to 312, inclusive."

Exhibit 327: There should be inserted "311 to 313, inclusive."

Exhibit 328: There should be inserted "312 to 313, inclusive."

Exhibit 329: There should be inserted "314 to 318, inclusive."

Exhibit 330: There should be inserted "320 to 323, inclusive."

It was pointed out yesterday that my Exhibit 325 fails to show the details of the Monongahela Railway locomotives used by me in my locomotive performance exhibits. I can furnish that information now.

[fol. 1910] (1750) Locomotive H-5-1 is a 2-8-0 locomotive, with a weight on drivers of 170,300 pounds, a tractive effort of 44,100 pounds and a tonnage rating of 4,500 tons.

Locomotive H-5-S-A is a 2-8-0 locomotive; weight on drivers, 178,340 pounds; tractive effort, 50,625 pounds; tonnage rating, 4,800 tons.

Mr. Keeler's witness showed the L-1 locomotive of the Monongahela Railway, that is a 2-8-2 locomotive; weight on drivers, 222,550 pounds; tractive effort, 65,700 pounds, with a booster. There is only one of that type of locomotive in service on the Monongahela Railway, and it runs between Maidsville and Brownsville Junction only. There are sixteen of the other type.

(1753) My attention is called to the fact that on sheet 3 of my Exhibit 255, in the fifth bracket, from the P. & W. V. mines via the route of the P. & W. V. and Wheeling & Lake Erie, I show Harmon, and opposite it show a tonnage rating of 7,020 tons, whereas on sheet 2, from Rexford to Harmon, under Massillon as a destination, I show a tonnage rating of 6,765. Starting from the same point, they both ought to be the same, and the tonnage rating in that territory is 7,020 tons. I show that from Rexford to Brewster, which is just about 2 miles beyond Harmon, and that is properly shown in the average for the entire state. I will have to make the calculations over to see whether that is a typographical error or whether it is a mistake. I will make a note of it, and it can be put in later.

[fol. 1911] R. L. IRELAND, JR. was called as a witness, and having been duly sworn, testified as follows:

Direct examination.

By Mr. Ballard:

(1754) R. L. Ireland, Jr., Executive Vice President, Hanna Coal Company, Cleveland, Ohio. I have immediate charge of the operation of the Hanna Coal Company's properties and general supervision of the entire business. I was Assistant General Manager and General Manager from January, 1924, until 1928, when I became. Executive Vice President.

The Hanna Coal Company produces and sells bituminous coal. In the past, it has operated mines in West Virginia and Pennsylvania as well as the No. 8 Ohio District and it now operates mines in the latter district. It sells its own product in Ohio, northeastern Indiana, Michigan and in the Erie and Buffalo Districts and for lake movement. It also jobs coal from many other districts for sale in these territories. That is, we job coal from districts in which we do not operate. We now only operate in Ohio, but we buy (1755) coal from practically all the other districts in the Appalachian field, for sale to customers in the same territories where we sell our own coal. Our Ohio operations are all in No. 8.

I am President of the Eastern Ohio Coal Operators Association which has for its members practically all of the large commercial shippers in the No. 8 field. I am familiar in a general way with the type of coal produced in the Cambridge District and the uses to which it is suited. I am authorized to testify for the Cambridge operators in this case.

[fol. 1912] (1756) The Ohio No. 8 District is located in Belmont, Jefferson, Harrison and part of Monroe Counties, Ohio. The total original recoverable tonnage was approximately 2,500,000,000 tons of which some 15 per cent has been mined out, leaving approximately 2,125,000,000 tons remaining. These figures are taken from a map which was prepared by an engineer named Hanlon and brought up to date by myself by using the figures put out by the United States Bureau of Mines.

The Cambridge District is located in Guernsey and a small part of Noble Counties, Ohio. The original recoverable tonnage was approximately 132,800,000 tons of which some 77 per cent has been mined out, leaving approximately 30,774,000 tons remaining.

The uses of No. 8 coal are restricted to steam and domestic use. It is a medium hard structure coal, high in carbon and volatile. It is also high in sulphur and low in fusion temperature. An average analysis of No. 8 mine run coal was given by Mr. Hoffacker and accords with our experience. While the sulphur content does not interfere with it as a steam or domestic coal, it precludes it from special purpose use. The low fusion temperature precludes it from use in plants where high burning rates are required and where (1757) they are not equipped to handle clinkers. So far as domestic use is concerned, the high volatile content plus its inherent burning characteristics, puts it in the class of ordinary domestic coal.

[fol. 1913] The No. 7 seam of coal is mined in the Cambridge District. The coal is very similar to No. 8, being more friable, and it has a somewhat lower sulphur content and a higher fusion temperature. Like No. 8, it cannot be classed as a special purpose coal. The average analysis of the mine run given by Mr. Hoffacker is in accordance with our experience. However, I want to correct an impression that he may have given as to Cambridge coal. He dealt with it as mine run on an analytical basis. It is slightly better than No. 8 for steam purposes on account of the higher B. T. U. value and the higher fusion temperature. It is less desirable for domestic use because of its friability. The principal all rail market for No. 8 and Cambridge coal is in northeastern Ohio. Our districts are closer to that market than any others in point of geographical location, and there is a heavy demand there for the purposes to which No. 8 and Cambridge coals are suited, namely—steam and domestic. Prior to the depression, this market absorbed 20 to 25 per cent of the total No. 8 and Cambridge production. About 20 to 25 per cent went to lakes. (1758) The balance is sold for railroad fuel and commercial consumption in northwestern Ohio, northeastern Indiana, and southern peninsula of Michigan, and to and through the Buffalo gateway.

Coals of every variety from virtually every district in the Appalachian field are marketed in northeastern Ohio. This competition is of several different kinds. As I have already said, our domestic coal is of the ordinary variety. [fol. 1914] Even the most ordinary domestic coals from Pittsburgh and Fairmont Districts are somewhat superior to ours on account of the difference in analysis, particularly the ash, which determines the heat units, and burning characteristics. The high volatile domestic coals from the Southern districts are practically all premium coals as compared with ours and, therefore, compete with us only indirectly. The low volatile domestic coals from the Southern districts are really special purpose coals, and we do not consider ourselves in competition with them. The situation with respect to steam coal is somewhat similar: In speaking of steam coal in this connection, I refer to slack coal which represents a large majority of the steam consumption. Our slack is suitable (1759) for the large majority of the steam market in northeastern Ohio and competed in varying degrees with slack from the Pittsburgh, Fairmont and Southern districts. There are some steam consumers in this destination territory who prefer slack coal from Pennsylvania or West Virginia and will pay higher prices than for Ohio slack, and there are other consumers who will not use Ohio slack at any price because of its analysis. As an illustration of this: The City of Cleveland electric plant buys about 120,000 tons of slack coal per year and buys it on an analysis which we cannot meet. I am not positive, but I think the coal bought by the City of Cleveland electric plant is Western Pennsylvania coal. It is not low volatile coal.

[fol. 1915] (1759) I am asked to refer to page 4 of Kern's Exhibit 52 and to discuss the influences which account for the variations in the amount and percentage of No. 8 and Cambridge coal marketed in northeastern Ohio from 1923 to 1931.

I agree with much of Mr. Morrow's testimony on this question but I do not think he fully explained the situation of the eastern Ohio districts as disclosed by these figures. In 1922 we had a five months' strike in eastern Ohio and the figures for that year are, therefore, (1760) of no significance. 1923 was a year of free production and movement from all districts, and we shipped approximately 43

per cent of the coal that moved to northeastern Ohio destinations. This figure includes the Middle District as well as No. 8 and Cambridge, but the Middle District's production is relatively small and the figures may be taken as indicating the No. 8 and Cambridge trend.

In the beginning of 1924, the Ohio operators signed the Jacksonville agreement, which held their wage scale at the highest level it had ever reached for a period of three years, from 1924 to April 1, 1927. During this time the wages in the Fairmont District and the Southern fields were being successively reduced which gave them an increasing competitive advantage and resulted in a falling off of eastern Ohio's percentage of the total business in northeastern Ohio from 43 to 35 per cent. April 1, 1927, the Jacksonville scale expired, and the districts were par-
[fol. 1916] alyzed by strike the balance of the year.

Toward the end of 1928 the mines began to resume operation on an open shop basis at a lower wage level. The increase in percentage of output in 1929 and 1930 and 1931 reflects the efforts of the operators in these districts to regain their lost markets. They also, however, reflect the shrinkage in the use of special purpose coal coming into these (1761) points from the fields where special purpose coals are produced. Also they reflect the fact, especially in 1931, that people, because of economic stress, were forced to buy the most economical domestic fuel possible instead of premium coals. They also reflect the fact that many industrial plants which in 1929, when the fire boxes under the boilers were taxed to the limit, had to buy high fusion temperature coal from other fields, because of their reduced loads have been able to purchase cheaper, lower fusion temperature coal. Had general business been the same in 1931 as it was in 1929, these three districts would not have furnished anywhere near the 33 per cent shown in the exhibit.

The foregoing discussion relates to the percentages on page 4 of Kern's Exhibit 52 which appear opposite the bracket of districts, No. 8, Cambridge and Middle, beginning in 1922 and running continuously through the years shown, up to 1930.

The total consumption of coal in Cleveland, Lorain, Akron, Canton and Massillon for 1931 is shown by Kern Ex-
[fol. 1917] hibit No. 52 to have been 9,139,890 tons. (1762)

Based upon figures which will be explained in detail by the next witness, this represents the following proportions of coal used for the purposes indicated.

Premium domestic coal	17%
By-product coal	26%
Special steam coal	4%
Steam and domestic coal from the eastern Ohio districts, namely, No. 8, Cambridge and Middle	33%
Ordinary steam and domestic coal from districts outside of Ohio	20%

The tonnages are as follows:

Premium domestic coal	1,560,000 tons
By-product coal	2,411,000 tons
Special steam coal	382,000 tons
Steam and domestic coal from the Eastern Ohio districts	3,024,000 tons
Ordinary steam and domestic coal from outside of Ohio	1,773,000 tons

The foregoing percentages and figures all pertain to the total shown by Mr. Kern of 9,139,890 tons of coal shipped to northeastern Ohio in 1931. (1763) That total of Mr. Kern's was divided first in percentages and then in tons.

The net result of these figures is that 47 per cent is non-competitive with eastern Ohio coal consisting of premium domestic, by-product and special steam coal. The manner in which this figure was arrived at and the reasons for regarding this business as non-competitive will be covered by the next witness. 20 per cent, or 1,773,000 tons, repre- [fol. 1918] sents business now enjoyed by the interstate districts for which Ohio is in a position to compete. I shall confine the remainder of my testimony to this 1,773,000 tons of interstate competitive business.

The total production of the districts in which this coal originates, namely, Pittsburgh and Fairmont, was in 1931 40,715,000 tons. The maximum tonnage at stake in this case as between the three districts in eastern Ohio on the one hand and Pittsburgh and Fairmont on the other is, therefore, less than 4½ per cent of the total production of interstate districts referred to. The total production of Pittsburgh and Fairmont was obtained from the Department of Commerce figures.

(1764) With respect to the 1,773,000 tons of competitive outside coal—in 1923, Eastern Ohio furnished 5,600,000 tons or 42.8 per cent of the coal moving into these five northeastern Ohio points. Were eastern Ohio to have the same percentage of the 1931 total tonnage moving to these points, it would have increased its tonnage 900,000 tons, or approximately half of the possible maximum tonnage from outside districts. The 900,000 tons is based on 1931. I have applied the percentage of 1923 against the total tonnage for 1931.

The influences through which we lost this tonnage were, primarily, through unsettled labor conditions in Ohio which caused large purchasers to seek a more reliable source [fol. 1919] of supply from other fields in which labor troubles were not so prevalent. Secondly, through the changing ideas of consumers as to what coal will best suit their purposes.

(1765) We hope that the result of the Ohio reductions will be to enable us to get back the 900,000 tons which we would have enjoyed under our former percentage, and perhaps increase this share. I say "perhaps," because included in my figure of 1,773,000 is the coal used by such sources as the Chase Brass Company, the Willard Storage Battery Company and Industrial Rayon Company, located in Cleveland. My company has tried for a long time to convert these plants to eastern Ohio coal, but even with the present freight rates we have been unable to do so. Likewise, the Firestone Tire & Rubber Company in placing its 1933 coal contracts, h[illegible]een fit to place 20 per cent in Pittsburgh and Fairmont, [illegible]e it could, if it would, buy all of its coal in eastern Ohio. The Firestone order was placed after the Ohio reductions had been in effect for many months. It has only been placed within the last 30 days. The company's plant is at Akron.

The 80 per cent of the Firestone's 1933 coal contract was placed in the three districts of eastern Ohio. Just where in those three districts, I do not know.

I might add (1766) that last year the Firestone Tire & Rubber Company took 15 per cent of their requirements by truck from the Middle District of Ohio. I do not know how much they are taking by truck in 1933.

[fol. 1920] If the Ohio rates were restored to the old level, it would by no means follow that this interstate competi-

tive business would remain with the interstate districts. There are a number of new and vital competitive elements in this situation which did not formerly exist and cannot be ignored. They are:

First, the competition of river coal moving on the ex-river rates; (1767) secondly, the competition of gas and oil as a substitute for coal; and, thirdly, the rapid development of the transportation of coal by truck.

In the case of ex-river coal, this has already been fully explained by Mr. Durham, but I would like to add that not only coal properties adjacent to the river but also coal properties many miles back from the river's edge can become river shippers.

I had occasion in 1929 to get a price on the completed installation of an aerial tramway from a coal mine located on Campbell's Creek which is tributary to the Kanawha River east of Charleston, across the mountains to the town of Belle, located on the river. This tramway was to be 8 miles long and rise to an elevation of 800 feet above its two termini. It was designed to handle 1,000 tons in 24 hours. The cost of making this installation, including everything except the cost of right of way, was to be $210,500.00. The estimated cost of operation, inspection and maintenance was figured at 9½ cents per ton and with interest and depreciation added, 15 cents a ton. This means that any mine located within this distance of the [fol. 1921] Ohio River could do the same thing for the same price.

Referring to oil and gas competition, within the past year the Timken Roller Bearing Company of Canton, Ohio, has switched from coal to gas; their consumption of coal was about 30,000 tons per year. (1768) The Stark Brick Company, also located at Canton, Ohio, has switched from coal to oil. Their consumption of coal was about 40,000 tons per year. I happen to know these two cases because we formerly sold the Stark Brick Company one-half to two-thirds of their coal requirement and we furnished some of the requirements of the Timken Roller Bearing Company.

This is just the beginning of this new form of competition for eastern Ohio which has already seriously affected

the producers and carriers serving the West, East and South.

A recently prepared estimate by R. B. Harper, Vice President of the Peoples Gas Light & Coke Company of Chicago, reveals that over a period up to the year 1930 natural gas displaced 37,000,000 tons of bituminous coal and fuel and gas oils displaced 82,000,000 tons of coal in the country at large.

Referring to the truck transportation of coal, the operators in eastern Ohio and Cambridge districts have become very much worried because of the rapid growth of truck mines which sell their product to independent truckers and we, therefore asked the Chief of the Division of Mines of [fol. 1922] the State of Ohio, to have his Inspection Department make a survey of the amount of coal being mined for truck transportation. This investigation showed that in the Pomeroy, Hocking and Crooksville-Shawnee Districts, there are 471 mines, employing between 2,100 and 2,200 men, (1769) producing approximately 8,800 tons of coal per day which is moving by truck. In the Cambridge District there are 175 truck mines, employing around 525 men, and producing approximately 1,400 tons per day, which is being transported by truck. In the Middle District, there are 151 truck mines, employing 2,475 men, producing approximately 7,000 tons per day, which is moving by truck. This makes a total of 797 mines, employing more than 5,000 men and producing better than 18,000 tons of coal per day which moves by truck, 30 per cent of which moves a distance of over 100 miles and over 25 per cent of which moves a distance of over 80 miles. The big majority of this tonnage is domestic coal which is paid for in cash at the mine by the individual trucker and sold for cash to the ultimate domestic consumer. However, quite a proportion is an all year round industrial consumption. This production of truck mine coal amounts to 2,733,600 tons per year on the basis of 150 working days. While the figures for total Ohio production for 1932 are not yet available, I would estimate that it will not exceed 17,000,000 tons. That is the grand total for Ohio.

If this is true, it means that 16 per cent of the 1932 Ohio production moved by truck lately from new truck mines and that over 8 per cent moved by truck a distance of over 80 miles.

[fol. 1923] (1770) These truck mines are operated on a co-operative or partnership basis in most instances; are not subject to the rigid inspection and requirements that the large rail mines are subject to; many of them do not pay their compensation insurance premiums, although their employes receive compensation insurance out of the general fund which derives its income from the rail mines and are, therefore, being supported by the latter to that extent.

Likewise, they put out of business the established retailers in the various towns which the trucks serve, take tonnage away from the established rail mines and deprive the railroads of the revenue haul. The truck moved tonnage so far referred to comes only from truck mines. In addition to this, there is considerable movement of coal by truck from rail mines which today are either shipping wholly or partially by truck.

A concrete example of this is a movement of some 60 tons per day from Steubenville to Akron and Barberton by an individual named Glotfelty, who owns 5 trucks and transports 12½ tons per truck per day a distance of about 90 miles.

It is true that trucks can never replace the railroad as the major means of transporting coal, but if the Ohio rates were restored to their former basis, it would greatly stimulate the development of truck transportation (1771) of coal and make serious inroads on the business of the rail mines and rail carriers. This is strikingly illustrated by the recent reduction in the 23130 scale which the Commis-[fol. 1924] sion authorized in Illinois for the specific purpose of meeting truck competition. Once the customer gets equipped to receive coal by truck, it is doubly difficult for the railroad to regain the business. We hope very much that the Commission will not wait until the horse is stolen to buy the padlock for the barn door.

The amount of interstate competitive coal which was marketed in northwestern Ohio in 1931 was 1,773,000 tons and it came from the Fairmont, Connellsville and Pittsburgh Districts. There was a very small amount which came from Connellsville that year. You could put it in your hat, but there was some.

If the present Ohio rates are maintained, we would expect to regain enough of this tonnage to restore to us the share of the northeastern Ohio market which we enjoyed

prior to the signing of the Jacksonville agreement and we might conceivably increase this proportion. If the Ohio rates are not maintained but are restored to their former basis, it is exceedingly (1772) doubtful whether any of this business can long be retained by the interstate districts because of the new and very serious forms of competition represented by river coal moving on the ex-river rates, gas and oil and coal transported by truck.

I have heard Mr. Hoffacker's testimony with respect to the five mines in the No. 8 Ohio district which mine other than Pittsburgh seam coal. I will have to agree with Mr. Hoffacker that coal mined from the No. 6 seam is a better [fol. 1925] quality, analytically speaking, than the No. 8 coal. However, of the five mines mentioned, the Steubenville mine of the Consumers Mining Company is a captive mine which delivers its coal to the Labelle Iron Works; the high shaft mine ships all of its coal by truck to local consumption; the Castner mine of the Warner Collieries Company ships nearly 50 per cent of its coal by truck to local consumption; so that the only mine left as a real competitor of the Pittsburgh District is the Nelms mine of the O. & P. Coal Company. The Coal Corporation No. 3 mine is in the 8-A seam which is a seam of coal very firm in structure but very high in ash and, therefore, of poorer quality than No. 8 coal. The capacity of the Nelms mine is 3,000 tons per day or about 3½ per cent of the capacity (1773) of the 65 miles in the No. 8 District.

[fol. 1926] Cross-examination.

By Mr. Bronson:

(1773) The figure I gave for 1931, of 1,773,000 tons was for coal from Fairmont and Pittsburgh, and possibly some from the Connellsville Districts into Cleveland, Lorain, Akron, Canton and Massillon, the five points covered by Kern's Exhibit 52. I have not the figures for Cleveland itself. Nor Pittsburgh.

So far as I can determine, that particular tonnage was steam and domestic.

(1774) As to the effects of oil and gas competition on the shipments from the Ohio No. 8 and Cambridge Districts, I am asked if the same would not be true of shipments from the Pittsburgh and other districts. That is just bringing

in a new source of fuel which deprives the carriers of revenue. Coal rates should be reduced where we have to meet potential oil and gas competition. Otherwise, we will lose it, and then we won't get it back.

By Mr. Bull:

When I spoke of the movement from Connellsville being a mere hatful, I was merely referring to its proportion of the 1,773,000 tons.

(1776) The 1933 contracts placed by the Firestone people for 20 per cent of their fuel requirements in Pittsburgh and Fairmont, I think were split about 50-50. I have no information as to what the percentage was in 1932.

[fol. 1927] By Mr. Orcutt:

(1777) In referring to new competition, I enumerated oil and gas and ex-river coal. Oil and gas are new forms of competition in northeastern Ohio. They have existed for several years only in a very minor degree.

The trucks are also new. We did not have the roads a few years ago. It is only since the taxpayers of Ohio have given the State enough money to build nice concrete roads up to the seam of coal that we have been able to get these truck mines started that are hurting us both.

It is true that the ex-river competition would theoretically be minimized or eliminated as the ex-river rates are increased up to the level of the all-rail rates.

By Mr. Henry C. Hall:

In speaking of the movement from truck mines in Cambridge and Ohio No. 8, in using that phrase I refer to mines from which the coal is moved only by truck. (1778) They are mines that have no railroad sidings, and the coal, after being brought out to the surface and screened, possibly, is loaded directly into trucks with no facilities for loading into railroad cars. The improved roads that Ohio has been providing run to these mines, or very close to them, so close that it is an economical proposition to build a satisfactory road from the actual site of the tipple to the main highway.

In the Ohio No. 8 District, they have been working on these roads continuously for a great many years, but the improvement has been very great in the last four or five

years. They have been building and improving roads in 1932.

[fol. 1928] (1779) From Cambridge and the middle district and the Hocking, Pomeroy and Crooksville-Shawnee districts are where the great number of truck mines are located.

In Ohio No. 8 there are very few truck mines, and the coal from those truck mines is used close to home. There are some exceptions in the northern part of No. 8 freight rate district, around Steubenville. The concrete example I gave you was one instance, and this Warner Collieries Company, the Castner Mine, moving at least 50 per cent. I do not know where all that coal goes but I know a large portion of it is used close at hand, but I believe some of it moves long distances.

The number of truck mines I mentioned was 797. I was given that figure by a computation made by the Chief of the Division of Mines of the State of Ohio, who got the information from each one of his mine inspectors from the particular mining inspection district. He sent these inspectors out (1780) to get this information and he tabulated the reports and sent us a letter inclosing the information which I have used. That was done in December 1932. I have no corresponding figure for December 1931. I do not think there is one that is quite as accurate as this one, but by general knowledge of the situation, based on the number of trucks which I have met on the highways while driving to and from our mines in eastern Ohio, I would say that there has been a material increase in 1932 over 1931.

[fol. 1929] I have no figures. I merely have a practical knowledge of it so far as Middle District is concerned because of my actual, personal experience and that of my friends who travel the roads by automobile day and night.

This supply of industrial coal in truck has grown simultaneously with the domestic. As the independent truckers have been able to bring down their costs of trucking by being able to travel on good roads (1781), they have been able to cut the price of trucking coal, and that, combined with the price that they have been able to buy coal for from the truck mines, has made it possible for them to get business which has developed as I have indicated.

When I mentioned the coal moved by truck in 1932, and it is a personal computation of mine, I used this figure that that state mine inspector gave me of 18,000 tons of coal per

day, which I know is not an all-year round movement, because a large portion of that is domestic coal. So, I used as a basis 150 days, being an average which would reflect both the maximum tonnage during the heating season when domestic coal was moving and the smaller tonnage the year around when the industrial coal was moving, and used 150 days as a figure, which, multiplied by 18,000 tons would, in my estimation, give a figure which would pretty closely represent the annual or the year's movement for 1932.

I have no figures for 1931 or 1930.

[fol. 1930] We have had good motor roads during these three years, from the mining districts. (1782) They have been better. They have been improved each year. Each year I have been able to reduce the length of time it takes me to drive from Cleveland to eastern Ohio, because of better roads—and not because I get better gasoline or a better automobile. So the same thing that helps me cut down my expense and my time makes it possible for the trucks to do the same thing.

By Mr. Bull:

The tonnage that I gave by truck is not included in the total that Kern used on his exhibit, but it is included in my estimate for the year of 17,000,000 tons, because the Department of Mines of Ohio gets the total production regardless of how it is transported from the mines.

[fol. 1931] The United States Bureau of Mines in showing production eliminates what are called wagon mines. They correspond to what I call truck mines. They are one and the same.

By Mr. Burgess:

(1783) The figures I gave in connection with truck mine coal, showed 1,800 tons a day as the combination of Pomeroy, Hocking, Crooksville and Shawnee, while the Middle District showed 7,000 tons a day. This coal moves very freely into Canton and Massillon, located in the Middle District.

The great majority of the domestic coal moving from truck mines by truck goes direct to the ultimate consumer. It is peddled in the same way that they peddle groceries and Fuller brushes.

The 1932 production from these truck mines in the Middle District is a very large portion of the total production. I might add, to explain further, that this is what happens to our Ohio rail mines: The trucker buys the coal from a (1784) truck mine; he goes to the door and sells his product, gets it in the cellar, and from that time on, because of the coal being prepared in an inferior manner, that customer says, No more Ohio coal for me, and away he goes across to help our friends in the Fairmont and southern fields. It is like some of the farmers peddling vegetables.

By Mr. Gutheim:

We consider Cambridge coal slightly better steam coal than No. 8 and a much inferior domestic coal.

[fol. 1932] (1785) In stating that our mines are nearer to the markets than the other mines, I had in mind the Cleveland, Lorain, Canton, Massillon and Akron markets—to these particular destinations and to the general area. I did not choose any particular points in the general area. A very simple way to do it is to take a map showing each district and then put your hand on northeastern Ohio and see which field is the nearest to it, as the crow flies or by road. The effect is the same.

The testimony I gave as to the use of slack coal had no reference to the Cleveland Electric Illuminating Company; I merely use that particular case as an example of what we are up against.

(1786) When we had a strike in 1922 for five months, quite a portion of the western Pennsylvania and the Kanawha District fields had trouble also. As to whether western Pennsylvania was generally affected the same as eastern Ohio for about the same time, I cannot answer specifically because I was not in this particular field at that time. I was over in the anthracite field of Pennsylvania and I followed with interest what was going on because we were having one in the anthracite field at the same time; so I have only got general information in regard to 1922.

When we signed the Jacksonville agreement on April 1, 1924, there were a lot of others who signed it too. (1787) At least the majority of the operators in western Pennsylvania signed that Jacksonville agreement. I do not know [fol. 1933] just what the Pittsburgh Coal Company did with reference to the Jacksonville agreement in 1924.

Western Pennsylvania got over its labor trouble quicker than we did. They started working on it earlier, and through the help of their state police they got through more quickly than we did. (1788) It is true that western Pennsylvania suffered a shut down before 1927, wherever operators abrogated the Jacksonville agreement and tried to go open shop or non-union on a lower wage scale.

Since we resumed operations in 1928 and 1929 there have been labor troubles in eastern Ohio like fleas.

(1789) In the preparation of my break-down of Kern's tonnage for 1931, shown on his exhibit 52, I had no occasion to give consideration to the current figures month by month.

(1791) As to whether I testified that we lost business right up to the time these rates were reduced, with reference to our percentage of reduction, our proportion of the 9,139,890 shown on Kern's exhibit, I said: "Had general business been the same in 1931 as it was in 1929, these three districts would not have furnished anywhere near the 33 per cent shown in the exhibit." And I came to that conclusion because of the statements I made immediately preceding. I have not testified at all with respect to our experience in 1932.

[fol. 1934] The 40,000,000 tons of production in Pittsburgh and Fairmont refers to the total production of the Pittsburgh and Fairmont districts. This includes all the captive coal there produced as well as the commercially sold coal, and it includes all the sales for railroad fuel, whether on a freight rate or dead head.

Speaking of not having yet regained certain specific trade, I was speaking for the No. 8 and Cambridge district as a whole. (1792) Also, it must apply to our own company.

Very little of the specific business that our company has lost has gone to competing operators in our same district. It has gone to other fields. In our own district business switches from one to another, back and forth, from year to year. What we have this year, our neighbor will have next year, and probably the next year we will get it back again. But, generally speaking, our proportion that has gone to other companies in our own field is very small, because anything that left us to go to some one else would be in the total, and the total is down.

The mines of my own company are located on the New York Central, Wheeling & Lake Erie and the B. & O. (1793) Our greatest capacity is on the B. & O., second on the New

York Central and last on the Wheeling & Lake Erie. We have two mines on the B. & O. Railroad. One is today producing 2,000 tons on a double shift, and the other one has a [fol. 1935] capacity of 2,000 tons, in eight hours, but is idle. Our mine on the New York Central is now producing 2,900 tons a day on a double shift and our other mine on the New York Central is abandoned. Our Wheeling mine has a capacity of about 2,000 tons a day, and is operating now. We are selling most of that coal as railroad fuel to various roads,—interstate roads. We are not selling it to the New York Central, the Pennsylvania, or the Baltimore & Ohio. To be specific, it is the Pere Marquette and the Erie and the Nickel Plate.

(1794) The competition of coal with gas and oil is not restricted to No. 8 coal or Cambridge coal; everybody has to meet it, and so far Ohio has been more fortunate than most other places, but we are getting it now.

Q. Is the competition of coal by railroad with coal by truck peculiar to No. 8 and Cambridge, or does that also apply generally?

A. I think that also applies generally.

Mr. Ballard: That is, for given distances you have in mind. There is not much trucking from Kanawha to Cleveland?

The Witness: Oh, no, within the same distance range. But even that varies. I was over in the anthracite district not long ago and found they were complaining because anthracite coal was being hauled two hundred and some miles by trucks.

By Mr. Gutheim:

(1795) Q. To whatever extent the truck movement of coal results in laying coal down at the destination at a lower price, everybody selling coal has to compete with it, do they not?

[fol. 1936] A. Yes, sir,

I got the bid for the tramway operation over the Kanawha River that I mentioned in 1929. I did not put it in. I know of several installations of that kind, where they tramway coal across the hills, or something like that. I do not know of anything of that sort operating up in this [fol. 1937] territory. I do know of some down on the Ka-

nawha River where they move it that way a short distance, or at least they were operating that way when I used to operate mines in the Kanawha District back in 1924. (1796) It is the same sort of a proposition, bringing coal from a mine to the river, as it is to take slate away from a mine back into the hills, and you have examples of that in the Pittsburgh Coal Company and in the Windsor Mine of the Ohio Power Company on the Ohio River just north of Wheeling. They work very nicely and very cheaply.

By Mr. Tefft:

Toledo is not a very important market for us from eastern Ohio. We go through Toledo to an important market, but Toledo itself, we do not enjoy. It has a very great amount of business, and we wish we had more. We do sell some tonnage there.

Redirect examination.

By Mr. Ballard:

(1798) The fact that Pittsburgh got out of the woods in the matter of labor trouble before Ohio did helped Pittsburgh and it hurt us because it gave Pittsburgh a foot-hold in our market that we have been having a tremendously difficult time to dislodge. The Cleveland Electric Illuminating Company is a good example of that. They got in and we have not been able to get them out.

[fol. 1938] P. C. Sprague was called as a witness, and having been duly sworn, testified as follows:

Direct examination.

By Mr. Ballard:

(1799) P. C. Sprague, Vice President, Hanna Coal Company, in charge of sales. I am located at Cleveland, Ohio. I have been in charge of sales since 1928. The Hanna Coal Company sells No. 8 Ohio coal from our own mines and also jobs coal from various districts in the Appalachian field.

In the course of my duties as the chief sales officer of the Hanna Coal Company, I have become familiar in a general way with the market for bituminous coal in northeastern Ohio. I have made an analysis of the 1931 consumption of bituminous coal in northeastern Ohio in so far as the total is disclosed by Kern's exhibit 52, and I have broken it down into the various kinds and uses of coal making up the total.

(Exhibit 333, Witness Sprague, received in evidence.)

The first page of this exhibit has seven columns and summarizes the tonnage shown on the remaining five pages of the exhibit. The figures in the total column, that is, the (1800) first column, are taken from Kern's Exhibit 52. I have made some further segregations than have been made by Kern in order to bring out certain points. Those segregations I have obtained from the Davis reports. The total in the first column of figures is Mr. Kern's total. The destinations covered are those named at the top, as shown, [fol. 1939] Cleveland, Lorain, South Lorain, Akron, Canton and East Canton, and Massillon.

Referring now to the second, third, fourth, fifth and sixth sheets of the exhibit, the first column shows the domestic coal that we have allocated to the points. In making those allocations, we have relied upon our general knowledge of the retail market at such points. Of course, it is difficult to make an accurate or exact allocation in so far as high volatile coals are concerned. We think we have made quite an accurate allocation so far as the low volatile coals are concerned for reasons that will appear later.

What I regard here as premium domestic coal is coal from districts outside of the No. 8 district, that is, southern coals (1801), high volatile and low volatile, which, because of their characteristics, value, prices, and so forth, are higher than the No. 8 coals. I admit that within the southern districts some of these coals may not be premium coal, as related to other coals, but I used the word "premium" here for the reasons stated.

The Davis exhibit shows that the Hocking District in 1931 shipped into Cleveland 102,116 tons. That is the first figure in the premium domestic column on page 2 of this exhibit.

(1802) The other Ohio tonnage, there shown as 8,492 tons, is a very small tonnage coming in from the Massillon group [fol. 1940] and the Latonia group, which, of course, is insignificant.

The southern West Virginia high volatile tonnage we have classified in the domestic group. We know of very little, if any, steam high volatile coal from the south coming into Cleveland. We do know that there has been a very large movement of domestic coal, and that figure there of 282,000 tons is not far wrong from what we would reasonably expect the movement to be. That coal comes from the Hazard, Harlan, Kanawha, and the Thacker seams.

The southern West Virginia low volatile we have had to obtain in this manner: We have allocated for by-product purposes in Cleveland the tonnage shown in the by-product column and have estimated that 20 per cent of the total mixture was low volatile coal, so that, as shown there, we have 1,041,000 tons of by-product coal which would require 260,407 tons to equal the 20 per cent. Now, into Cleveland the total of low volatile movement, as shown in the Davis report, is 983,999, and deducting the by-product coal we have a figure (1803) there of 723,592 tons.

We have also segregated 35,176 tons of what I call semi-low volatile coal from the Altoona and northern Maryland district. There was quite a sale of that coal in Cleveland in 1931.

The by-products column figures on all of these sheets, [fol. 1941] with the exception of Lorain, were obtained in this manner: The United States Bureau of Mines issues a report yearly which shows the total consumption of by-product coal in Ohio, and in their report Cleveland, Canton and Massillon are segregated from the rest of Ohio. That report for 1931 is not out; therefore, I obtained from the Bureau of Mines the tonnage. It is in manuscript form and, I understand, will be issued in about 30 days. Their report up to 1930 and table 18 of that report shows the consumption at those points in 1930. And I asked for the information for 1931, which they gave as 1,614,998 tons, which covers both high volatile and low volatile.

Now, at Canton and Massillon we are able to make a segregation of the high volatile and the low volatile coal because of the Connellsville movement in there. There is the (1804) district where the by-product coal originates,

because all the Connellsville coal to Canton and Massillon is high volatile by-product coal. By making a deduction of the Canton and Massillon totals from the figure obtained from the Bureau of Mines, we were able to get the Cleveland by-product figure.

I got the division as between Pittsburgh and Fairmont, on the one hand, and Connellsville, on the other, from the Davis report, and they are shown, by the way, on Kern's [fol. 1942] exhibit 52. I know that the Connellsville coal as shown in the Davis report and the Kern exhibit is by-product coal. Then what is left I have assumed is by-product from Pittsburgh and Fairmont.

(1805) The third column, 120,000 tons of special steam coal, is coal which is for the Cleveland Electric Light Plant, to which Mr. Ireland referred. That is analysis coal that I cannot get. I have here a copy of their notice for 1932 coal, which is the same as 1931 so far as analysis is concerned, and we cannot meet that analysis because of their sulphur requirements and their fusing.

That 120,000 tons I think came from Freeport in 1931, but Freeport is included in the Pittsburgh figures as given by Mr. Kern.

The next column is headed "Total Non-affected tonnage," and is the total of the three preceding columns.

(1806) The next column, headed Steam and Domestic from No. 8, Cambridge and Middle, is from Kern's exhibit 52. It is just the figure in the first item in the first column of figures. The figure in the last column is the difference between the total Pittsburgh-Fairmont tonnage, from which is deducted by-product and special steam coal. It is 2,132,000 less 751,000.

[fol. 1943] Referring to the remaining sheets of this exhibit—at Lorain and South Lorain there is a large movement, we know—at least in 1931—of high volatile domestic coal from the southern district. The by-product coal there, which is used by the National Tube Company, comes from Connellsville, and is shown in Kern's exhibit. The low volatile coal is shown in the Davis report. That enabled us to make the segregation on the by-product coal. The column there headed "Special Steam" is arrived at as follows: There are two plants at Lorain which use a large amount of steam coal. (1807) The first is the Cities Service Company, and the second is the National Tube Company.

There is very little, if any, steam coal outside of those plants, used at Lorain.

The Cities Service Company has been buying for some few years all of their coal outside of the Ohio District. They claim that they require a lower sulphur coal, that it stocks better and they get a better performance all around on that coal outside of the district than they do inside of the district.

The corporation coal is steam coal largely for their plant, which originated in the Pittsburgh District to a great ex- [fol. 1944] tent, I assume at their own mines. They have the National Mining Company, and I am quite sure it is.

On page 4 there are two figures there which I might explain. The first is that Pittsburgh-Fairmont domestic tonnage into Akron. That is our estimate which is secured by our sales force and myself as we have been able to develop it in Akron. We know that Akron is a very good, or has been a very good (1808), market for Pittsburgh and Fairmont coal, and for southern West Virginia coal. We sell quite a lot of Hazard coal in Akron. That is the basis upon which we arrived at those figures. We have shown Pittsburgh and Fairmont together; I cannot make any separation there. That also is true as to each one of these sheets of this Exhibit 333—that we cannot segregate Fairmont and Pittsburgh. Of course, when you get to Massillon, there is very little from either district.

The American Vitrified Products Company, in Akron, buys a large quantity of what they call kiln coal. We have been trying to get that business for quite a few years on Ohio coal, but have not been able to. They claim that sulphur is the controlling element, and today that tonnage of 50,000 tons of special purpose steam coal is moving in [fol. 1945] there from either the Pittsburgh or Fairmont district, I do not know which.

(1809) Referring to sheet 5, Canton is quite a large consuming point for southern high volatile domestic coals, and the figures there shown are based upon our knowledge of the situation. There is a by-product plant there, and we know that the coal for by-product purposes comes from the Connellsville region, and that the southern West Virginia low volatile coal is for by-product purposes.

Massillon, Ohio, I think speaks for itself. The Connellsville and southern low volatile tonnage there is for by-

product purposes and comes from Connellsville and the southern low volatile group.

[fol. 1946] Further testimony of C. B. ACKERMAN.

By Mr. M. Carter Hall:

(1811) Before the West Kentucky Coal Bureau Case, I was engaged in numerous Illinois intrastate cases—the Boley Ice Company case, a case known as the Black Case, and numerous sand and gravel cases, among others. I believe the first was in 1925.

I made an investigation in the West Kentucky Coal Case, and I covered the Illinois, Indiana and western Kentucky situation. Some of that information was used in a later case involving rates from southern Illinois to Dixon, Illinois. Then I was in (1812) numerous Illinois cases and made what revisions were necessary, and I presented similar testimony in the Illinois 13th Section cases. Of course, I was in the Eastern Bituminous Coal Case, and I was in the Lake Cargo Case, and prior to this case, some two or three months ago, I made a field investigation in Ohio touching all the roads I testified about.

With reference to the year 1928 and my testimony in the West Kentucky Coal Bureau Case, I have not made any field investigation in west Kentucky since that time.

In Illinois I have made investigations enough to satisfy myself that my figures were reliable, making such changes as were necessary, and, in addition to that, the carriers have from time to time in these cases in which I have participated introduced similar testimony, which I have com-
[fol. 1947] pared with mine and made such adjustments as were necessary. (1813) As to what part of Illinois territory I actually covered by field investigations since 1928, I will have to get my books out to determine that.

Some of the information that I have shown on my Exhibit 267 was introduced by the carriers themselves in the Illinois 13th Section Case, and I have compared that with the information which I secured in my prior investigations, and I think you will find that all that information is current information as of today. My office is at Chicago, and the railroads enter there, and I frequently get information right there at Chicago of the kind I want.

My field investigations were conducted by traveling by automobile through the various territories, (1814) as I testified yesterday, and that was supplemented and brought up to date as a result of the various hearings in which I have offered similar testimony or which I attended.

I am asked whether I have been in the southern Illinois field or made any field study of operating conditions there since 1928. I was along the Illinois Central Railroad in April, 1930. (1815) At that time I was investigating sand and gravel distribution, for the purpose of securing operating testimony. I was prepared at that time to put locomotive performance charts in in the sand and gravel cases, but the case did not go to hearing. I got the information. [fol. 1948] In bringing down to date my exhibits in this case, the last information I secured was in the Illinois 13th Section Case, in which certain of that type of information was shown, at least the tonnage ratings were shown at that time. I think I testified in the Illinois 13th Section Case in 1931. (1816) It may have been in 1930.

Up to a very short time ago all these tonnage ratings of the Illinois Central Railroad were carried in their time tables, and they were on file at Springfield, and I have always had access to them. That was discontinued a short time ago. I have made inquiry, however, and there have been no changes in operation.

It would not be fair to say that the bulk of my testimony with respect to these Illinois Central locomotive performance charts was gotten from places other than on the operating divisions with respect to which I made the charts. I have made enough investigation among the railroad employes that I came in contact with to ascertain that there have been no substantial changes, and I have kept the information current from the publications of the railroads.

(1818) I have stated that I made an investigation in southern Illinois in 1928. I made an investigation in 1930. I come in contact with railroad men constantly, and I have access to information—and have had during practically all that time—sufficient to keep me informed (1819) of any [fol. 1949] changes which might take place; and I consider that the data which I have introduced for the Indiana-Illinois territory is current, except that I have supple-

mented that by inquiries for the purpose of constructing this and similar exhibits.

By Mr. Keeler:

(1822) On my Exhibit 324 there is a slight typographical error that should be corrected. After the character "H" in parentheses, next to the last sentence on the sheet, after the word "Column", the letter "E" in parentheses should be the letter "F".

[fol. 1950] Direct examination of P. C. Sprague (continued).

By Mr. Ballard:

(1823) My exhibit 333, the Cleveland sheet, page 2, refers, in the Column 2 headed "Premium Domestic", to the two southern items, southern West Virginia and eastern Kentucky high volatile of 282,000 odd tons, and the southern West Virginia low volatile of 723,000 odd tons. I have prepared an exhibit of the prices on these domestic coals in Cleveland, for the purpose of indicating to what extent they come in direct competition with No. 8 and Cambridge domestic coal.

(Exhibit 334, Witness Sprague, received in evidence.)

I made a canvass of the retailers in Cleveland. I confined myself to the leading retailers, such as the City Ice & Fuel Company and others, and these retail prices which I show here reflect their retail prices. In addition, Mr. Hornikel testified that his Dorothy coal in Cleveland was bringing about $6.00 to $6.50. That is Southern high volatile coal. I show it here as $6.00. (1824) Mr. Richards testified that his coal, that is, Pocahontas, was bringing from $7.00 to $7.50. I used a figure here of $6.90. I may say that of the names used here everything except Pocahontas is high volatile.

The Dorothy is in the Kanawha District; also the Island Creek. The Millers Creek is in the Kentucky District, [fol. 1951] on the Big Sandy Division of the C. & O. The Elkhorn is on the Big Sandy Division of the C. & O. in eastern Kentucky, and the Pocahontas is in the Pocahontas District. The Ohio Lump is in the No. 8 district of Ohio.

(1825) We are in touch with the mine price situation,

and these prices reflect our experience. In addition, Mr. Hornikel, so far as his Dorothy coal was concerned, testified that it was bringing from $1.25 to $1.50. I have used $1.40. The Island Creek and other prices are based upon our recent experience in connection with the purchase of those coals. We are in close touch with the market at all times. We have actually bought these other coals, or they have been offered to us at these prices.

The freight figure is simply the freight rate, plus the surcharge. The margin is the difference between the mine price plus the freight and retail price.

The margin on Ohio coal is, of course, lower than any other margin. And I might say this at the outset: That when an operator (1826) sells coal to a retail dealer, the control in so far as prices are concerned—and I might say as to sales of particular grades of coal—he does not control it. The retailer does. If he offers Ohio coal at $1.29 margin and makes a price based upon that margin, that is one thing. If he offered all of the other coals at that margin it might be that these other coals would move in [fol. 1952] greater volume to Cleveland. In other words, the margin here to a great extent, determines whether the coal moves then or whether it does not, so far as the price is concerned. That to a great extent is in the hands of the retailer.

I do not think that the 29-cent change in the freight differential would have any influence on the movement of these coals in the face of these retail margins; and I arrive at that in this way: The average householder consumes about ten tons over the season. That means that their coal bill is affected by the 29 cents to the extent of $2.90, we will say, for the five months of the winter period, or from 50 to 60 cents a month; and I do not think that is sufficient to swing any high grade domestic coal to a low grade domestic coal. It might have the effect of increasing the consumption of low grade domestic coal (1827) from one district as against another.

The average mine price given here is for lump coal, in all cases.

The retail price in Cleveland, for Hocking lump coal at no higher than $1.40, by one of the large distributors there, is $5.25. That is $1.30 above No. 8.

(1828) I have prepared an exhibit showing the shipments to northeastern Ohio destinations, taken from Kern

[fol. 1953] Exhibits 50 and 52, and the total production of the corresponding districts, taken from the Department of Commerce figures for 1931, the same year.

(Exhibit 335, Witness Sprague, received in evidence.)

The righthand column shows the percentage of total production of the various interstate districts which in 1931 was marketed in northeastern Ohio. I have a general knowledge as to what other markets these outside districts enjoy besides northeastern Ohio. So far as the Pittsburgh district is concerned, they have markets to the east and to tidewater, and to lake.

Connellsville has markets which are about the same. The Connellsville coal is, I think, nearly all by-product coal, and they go into the Buffalo District quite strongly with by-product coal. The Fairmont District, of course, has the eastbound and (1829) tidewater outlet, and some to lake and some to New York State.

The remaining districts, which I think we can group, have outlets to the East, to tidewater, to the South, to the Middle Atlantic States and to points west of the Mississippi River, such as Iowa, Minnesota and the Dakotas. They have a much wider outlet for their coal than the others.

[fol. 1954] The southern districts also enjoy the Ohio and C. F. A. territory markets other than notheastern Ohio, including Indiana, Minnesota, New York, Michigan, etc. In contrast to this widely extended market of these interstate districts, the eastern Ohio coals are marketed in northeastern Ohio, to the lake, to northwestern Ohio, Michigan, Ontario, and to some extent in western New York, —that is, to Buffalo and through the Buffalo gateway. (1830) We have no tidewater market, no eastern market beyond Buffalo, no southern market, and no market in the central West, like Illinois, Chicago, and Iowa.

Cross-examination.

By Mr. Keeler:

Table 18 in my Exhibit 333, with regard to by-product coal, is the information for 1930, and that information is available in manuscript form for 1931, and I secured from the Bureau of Mines that information for 1931. I do not know how that information is gathered by the Bureau of

Mines. I assume that they ask each individual by-product plant for the information. (1831) I think it is secured from sources of consumption.

By Mr. Bronson:

Referring to the figure in the last column of 1,772,225 for the Pittsburgh and Fairmont Districts combined, I do [fol. 1955] not believe it would be possible to split the figure because of the by-product coal. I could have made that segregation, but I had to make the assumption there that the by-product coal into Cleveland came from both districts. If it is correct that it came from the Fairmont District or the Pittsburgh District, the segregation, I think, could be very accurately made. But I did not have the information as to where it came from. I do not know where I could secure information that would enable me to determine whether the by-product movement to Cleveland—that 631,223 tons—came from Pittsburgh or Fairmont.

By Mr. Henry C. Hall:

I segregate Connellsville because I know that is all (1832) by-product coal. That was shown in Witness Kern's exhibit.

By Mr. Keeler:

I assume that the term "Connellsville" here is the same in territorial area as the Connellsville rate group.

There is no place in this publication that defines what is the Connellsville District. The Kern Exhibit shows that the movement from the Connellsville District—that is, what he calls the Connellsville District—into these points is so much. I assume that it is by-product coal. For my purposes, I do not care whether it overlaps or not. It is noncompetitive.

[fol. 1956] I cannot state, concerning the use of steam and domestic coals in Cleveland, how the 1,772,000 tons would divide as between Pittsburgh and Fairmont.

Br Mr. Bronson:

(1833) I do not believe I could hazard an opinion on that. I know that both districts in 1931 shipped a substantial amount of coal into Cleveland.

It is true that Ohio No. 8 and Cambridge have a rate advantage over Pittsburgh of 50 cents to all destinations west of the Galion-Sandusky line.

Prior to August 1, when the Wheeling reduced its Ohio No. 8 rates and the Ohio Commission reduced the Canton and Massillon rates, Ohio had a 10-cent advantage under Pittsburgh to Cleveland, Lorain and Huron. Ohio was on even terms with Pittsburgh to Youngstown, from substantially all the mines in the No. 8 District.

(1834) If you will eliminate Erie, I agree with you that Ohio was on even terms with Pittsburgh to all destinations in northern Ohio and northern Pennsylvania as far east as Buffalo. I do not believe they have the same rate into Erie. They have the same rate into Buffalo and to Ashtabula.

[fol. 1957] In the past two or three years the Pittsburgh District got a rate reduction to the East amounting to about 15 cents, where they put Pittsburgh on the same basis as Westmoreland. Your question as to whether I know of any substantial volume of tonnage ever moving from the Pittsburgh District to tidewater or any other eastern destinations is a difficult one for me to answer, because I do not know whether you are referring to the Pittsburgh District as I know it or as you know it. (1835) That is, I believe the Pittsburgh District is split in a different way eastbound than westbound.

With respect to the Pittsburgh mines which have the Westmoreland District rate, which is 25 cents over Clearfield, I do not know of any coal of any value at all which has moved from that territory to the East.

By Mr. Armstrong:

On each of the pages of my Exhibit 333, the statement is made that the tonnage is not affected by the rate reduction, and I have explained that that does not mean that there has not been any rate reduction in the Hocking field. The heading on each page of my exhibit means that it is non-competitive. (1836) They are coals which would move regardless of this 29-cent rate reduction.

The tonnage set out on the second page, Hocking District, 102,116 tons, I think would have moved from the [fol. 1958] Hocking District regardless of the freight rate.

The freight rate would make no difference—based on the price at which it is sold at Cleveland. The differential there is more than sufficient to absorb that difference in freight rate.

I stated that the price in Cleveland on Hocking fuel—the City Ice & Fuel Company's price is $5.25. That is not the only retailer from which I obtained information. I would say that they are the important retailers of Hocking Coal. I do not know that good Hocking coal is retailing in Cleveland at a price of $4.65.

By Mr. Keeler:

(1837) I did not use the tables of which Table 18 is representative in arriving at my mathematical calculations. I just submitted that to show that the information was available, in so far as Canton, Cleveland and Massillon were concerned. Then I stated that for 1931 information similar to this has been gathered by the Bureau of Mines. I read the tonnage figures obtained from the Bureau of Mines into the record. It was a million nine hundred and some thousand. Now, I allocated at Canton and Massillon, as by-product tonnage, the Connellsville and Pocahontas tonnage, and I deducted that from the one million nine hundred thousand and some odd tons, which gave me the [fol. 1959] total consumption in Cleveland of by-product coal.

I made no separation as between the high volatile districts of the south and Connellsville in determining the amount of by-product coal that was shipped.

(1838) The 873 tons of steam coal from the Connellsville District went to Akron, where there is no by-product coal consumed. My exhibit indicates that only those 873 tons of Connellsville coal were used for steam purposes in northeastern Ohio in the year indicated. That is, at these points.

By Mr. Keeler:

(1839) When I speak of the Connellsville district I am talking in a broad sense. When I say "all" by-product coal I mean substantially all. I am not interested in a few thousand tons of steam coal from a particular district.

By Mr. Gutheim:

The 35,000 tons of premium domestic coal from Pittsburgh and Fairmont, shown on the exhibit, was coal from the Pittsburgh district. I classify the Pittsburgh district coal as premium coal in this way: Your Mr. Striebel stated, I believe, that the domestic retail price out there was $5.00, and our retail price in Akron, taking that specifically, is $3.75 about. I merely used the word "premium" to distinguish between a higher selling price coal in the retail price. Your coal, as compared with Millers Creek or Elkhorn, is not premium.

[fol. 1960] (1840) I think some of this was the so-called Champion coal. I do not know, but I would assume, that the Champion lump coal is not specially prepared.

With respect to "some domestic coal not affected but cannot be allocated," shown on my Canton sheet from Pittsburgh and Fairmont, we know that some of those coals move into Canton. There would be some Pittsburgh coals —I do not mean Champion altogether—some west side coals from the North American and coals of that type.

(1841) The current figures for the Pittsburgh and Fairmont districts are not available. My reason for not showing them separately was in order to get the by-product figure there to Cleveland. I just explained that a few moments ago.

In connection with my Exhibit 334, I took Mr. Striebel's $5.00 price there as the domestic price of Pittsburgh coal in Cleveland. When Mr. Striebel was on the stand he referred to a current price of $5.00. (1842) It is possible that he also testified that there is not a domestic dealer selling Pittsburgh coal in Cleveland; but I do not see why he would testify that it was $5.00 a ton if there was not.

On my Exhibit 335, the tonnage of 24,478,000 total production includes all kinds of coal, steam, domestic, gas and by-products. It also includes all of the captive production and all the coal which sold locally in the district.

[fol. 1961] I do not know definitely whether Winding Gulf, in my Note 2 on this exhibit is part of our New River or Pocahontas territory. Coal River and Logan are part of Kanawha. (1843) There are certain sections of Coal and Coke that may be, such as the section down near Charleston.

By Mr. Burgess:

I am reminded that on sheet 5 of my Exhibit 333 I show 49,132 tons of Pittsburgh-Fairmont coal as going to Canton as steam and domestic coal. Some of that is gas coal going to the United Engineering & Foundry Company, at Canton. I know that that company consumes gas coal to the extent of about 15,000 tons a year. That would be unaffected tonnage. I should say that the Stark Brick Company also got around 10,000 tons in that district from 1931. (1844) We sold them about five or six thousand tons, I would say. That was unaffected tonnage also.

By Mr. Bull:

With respect to my Exhibit 333, at page 4, I started to explain how I determined that that 50,000 tons of special steam coal came from either Pittsburgh or Fairmont. We know that they use a coal of about 1½ per cent or less in sulphur; that that coal is readily available in the Pittsburgh or Fairmont District, where they have a rate differential under the Southern districts. In addition to that, we are buying some coal—have bought some coal—for the Sebring Pottery Company, which also uses kiln coal at Sebring. We bought that in the Pittsburgh District on account of the sulphur.

[fol. 1962] With our knowledge of the differential situation, the prices on coal as related to the South, on the one hand, and Pittsburgh and Fairmont, on the other, I cannot conceive that the consumer at Akron, the American Vitrified Products Company, would go to southern West Virginia for coal. That is the reason I gave that testimony.

(1845) I know that none of the by-product coal which I show at Cleveland came from Kentucky because of my general familiarity with the situation there.

By Mr. Keeler:

I am reminded that I show no high volatile by-product coal moving into this area from southern West Virginia or Kentucky. All of the by-product coal consumed in these plants in northern Ohio or northeastern Ohio I have allocated to Connellsville, with the exception of Cleveland. I have allocated to Pittsburgh and Fairmont some tonnage.

My Cleveland figure does not cover the Painesville plant of the Diamond Alkali Company. This exhibit covers just the points that Mr. Kern covers in Exhibit 52. The figure showing "consumption of coal" by the by-product plants does not include the plant of that company at Painesville in the Cleveland figure.

Redirect examination.

By Mr. Ballard:

(1846-7) In 1931 we endeavored to sell the U. S. Steel Corporation—that is, their American Steel & Wire plant—steam coal from No. 8, and we could not do so because they were shipping that coal from their mines in the Pittsburgh district. So, if the figure of total production in the Pittsburgh District includes captive coal, so does the competitive movement into northeastern Ohio in that same year.

[fol. 1963] Recross examination.

By Mr. Gutheim:

(1846-7) The National Tube coal is also captive coal from the Pittsburgh District. Lorain is in northeastern Ohio.

[fol. 1964] W. J. McCauley was called as a witness, and having been duly sworn, testified as follows:

Direct examination.

By Mr. Ballard:

(1848) W. J. McCauley, Akron, Ohio; Traffic Department of Goodyear Tire & Rubber Company. I have been connected with that department of the Goodyear Company for a period of 11 years. Prior to that time I was, for four years, with the traffic department of the Milwaukee Coke & Gas Company and its subsidiary companies. Prior to this connection, I was employed by the Pere Marquette Railway as travelling freight agent, and prior to this connection with the Pere Marquette, I was employed jointly by the Pere Marquette and the Lackawanna Railroads as Agent of what was then known as the Pere Marquette-Lackawanna Line.

(1849) In my present capacity with the Goodyear Tire & Rubber Company I am engaged in handling rate matters, including rate investigations and rate adjustments through negotiation and rate litigation.

Under the ruling of the Examiner at Columbus, the Goodyear Tire & Rubber Company is an intervener in the 13th Section case and the four complaints now on hearing. Our purpose in intervening is to prevent any increase in the rates from Ohio No. 8 field to Akron above a maximum reasonable level.

(1850) The Goodyear Tire & Rubber Company is a corporation organized under the laws of the State of Ohio. It is engaged in the manufacture of rubber tires, tubes, accessories and of various other articles of rubber manufacture, [fol. 1965] including rubber belting, rubber hose, rubber packing, rubber heels, rubber tiling, rubber matting, etc. While operating other plants in various parts of the United States and abroad, its main office and its main plant are located in Akron, Ohio.

In the manufacture of our products large quantities of steam coal are consumed and the freight cost on this commodity is a matter of considerable moment to us.

For years we have been obtaining the bulk of our Akron coal requirements from the Wheeling Township No. 2 Mine, which is situated in the Ohio No. 8 District, on the Wheeling & Lake Erie Railroad, near Adena, Ohio. This mine is owned and operated by the Wheeling Township Coal Mining Company, a subsidiary of the Goodyear Tire & Rubber Company. As a result of breakdowns and labor troubles in the No. 8 District, this source of supply has been interrupted occasionally, but for over a period of years this particular mine has produced practically all of the coal used by us at Akron.

Our annual coal freight bills (1851) will run between $500,000 and $750,000. We are receivers as well as shippers. We pay and bear the freight charges ourselves and, accordingly, the level of the rate itself is a matter of vital importance to us rather than differential relationships.

[fol. 1966] Having undertaken the purchase of a mine, as in our case, it cannot be abandoned without heavy loss and, therefore, taking into consideration that we look to our mine to furnish us with our full requirements at Akron, the maintenance of just and reasonable freight rates on

coal from the Ohio No. 8 District is of especial importance to us.

The tonnage shipped from the Wheeling Township No. 2 mine to the Goodyear Tire & Rubber Company at Akron represents a considerable portion of the entire bituminous coal tonnage received at Akron from all coal producing points.

In 1929, this mine shipped to us at Akron 487,356 tons; in 1930, 439,725 tons; in 1931, 389,234 tons, and during the first six months of 1932, 181,407 tons. The tonnage of 1930, for example, represented 20 per cent of the total tonnage received at Akron from all Ohio districts and inner and outer crescent districts. I think I ought to add in there that the tonnage for 1930 represented 20 per cent of the total tonnage received at Akron from all sources. The tonnage of 1930 represented 35 per cent of the coal received at Akron from all coal producing sources in Ohio, 48 per cent (1852) of all coal received at Akron originating in the No. 8 District, and 81 per cent of all coal moving into Akron having its origin in the No. 8 District on the Wheeling & Lake Erie Railroad, the greatest producer by far of Akron destined coal.

[fol. 1967] During the years 1929, 1930, 1931 and the first six months of 1932, we moved from our mine to ourselves at Akron 1,497,772 tons of coal. Obviously, reduced costs at both ends of the haul and at division points are reflected in heavy movements of this character where the coal has its origin at one single operation and one single delivery point as its destination.

I might say, too, at this point that while the average short tariff distance from mines in the No. 8 District to Akron is 98.2 miles, all of the tonnage just referred to moved from a mine where the actual short tariff distance was but 86.4 miles.

My first exhibit, No. 336, is a history of the coal rate from the Ohio No. 8 District to Akron from the year 1916 up to date. The statement also shows the rate from the Ohio No. 8 District to Canton. Akron, with respect to the Ohio No. 8 District, is located in short haul rate territory and the rate from the Ohio No. 8 District to Akron is not and was not at any time related differentially with the rate from the Pittsburgh, Connellsville or any crescent district.

(Exhibit 336, Witness McCauley, received in evidence.)

(1853) In 1916, the rate from the No. 8 District to Akron was 80 cents per ton. In 1917, under what is known as the 15 per cent case, 45 I. C. C. 303, coal rates generally were subjected to a 15-cent per ton advance. This had the effect of elevating the rate from No. 8 District to Akron up to [fol. 1968] 95 cents.

Under General Order No. 28, on June 25, 1918, the No. 8 to Akron rate became $1.20, remaining at this figure until August 26, 1920, when, under ex parte No. 74, all Eastern coal rates were increased 40 per cent. A straight increase of 40 per cent would have brought the rate to $1.68. However, the order of the Commission in ex parte 74 required the maintenance of existing differentials in the making of percentage increases, and in compliance with the Commission's order, the carriers, in error, assuming that the No. 8 to Akron rate was related differentially with the rate from the distant Connellsville fields, published a rate of $1.76½ to apply interstate, the increase approximating 50 per cent. Those two rates are shown in the Column on Exhibit 336 headed August 26, 1920.

The interstate rate published to Canton was likewise given arbitrary treatment as it was advanced from $1 to $1.56½. However, the Public Utility Commission of Ohio held (1854) that the rates from Ohio Coal Mining districts to Ohio intrastate points should be increased by not more than 40 per cent over rates that were effective on August 25, 1920, or immediately prior to the effective date of ex parte No. 74.

Otherwise, if differentials were observed, where they existed, the intrastate rates to differential territory in Ohio would have been increased considerably more than 40 per [fol. 1969] cent. On August 26, 1920, then, the Ohio No. 8 to Akron rate became $1.68 intrastate and 1.76½ interstate.

On July 1, 1922, as a result of the Commission's order in Reduced Rates, 1922, 68 I. C. C. 676, the rates from Ohio Coal Fields and from the crescents were reduced 10 per cent. That decision also required that in applying reductions, recognized rate relationships and differentials should be maintained and the published rate of $1.57 reflected the relationship which, it was assumed, existed between the No. 8 to Akron rate and the Pittsburgh or Connellsville to Akron rate.

For a period of a little over two and a half months, this was the going rate, both interstate and intrastate. However, on September 21, 1922, on an order of the Public Utilities Commission of Ohio, the intrastate rate was reduced down to $1.51, the order of the Ohio Commission requiring that the intrastate rates in effect immediately prior to July 1, 1922, be reduced a full ten per cent. (1855) Those two rates, state and interstate, are shown in the column headed September 21, 1922.

Thus early in 1923 we still find Ohio Intrastate rates on a lower basis than the interstate rates. Late in 1922 under I. C. C. 12851, Ohio-Michigan Coal Cases, 80 I. C. C. 663, an investigation was instituted under Section 13 of the Act, upon petition filed by carriers to determine whether the intrastate rates on bituminous coal within Ohio maintained by the order of the Public Utilities Commission of [fol. 1970] Ohio, were not preferential of Ohio and prejudicial to Pennsylvania and West Virginia Groups. However, in this case the Commission plainly said on page 688 of the report that "the rates from Ohio Mines to short-haul territory in southern and eastern Ohio, which have never been differentially related to the rates from the crescents, are not involved in this proceeding.

The No. 8 to Canton rate was not affected by this proceeding and it is our contention that the No. 8 to Akron rate should have been given similar treatment.

However, following the finding of the Interstate Commerce Commission in the case just referred to, the carriers approached the Ohio Commission and secured its permission to publish the advances in line with the Commission's findings.

(1856) Rates were published to go into effect on September 27, 1923, the Akron intrastate rate being increased to $1.57 or to the same level as the interstate rate, which, as was said before, was predicated on differentials under the Connellsville rate.

The $1.57-rate to Akron remained in effect until December 1, 1924. We, as well as many other Akron interests, were much dissatisfied with this adjustment and, after some negotiations with the carriers, a voluntary reduction was made by them down to $1.51, the reduced rate going into effect on December 1, 1924. That is shown in the column headed with that date on the exhibit. It represented a vol-

[fol. 1971] untary reduction down to that basis ordered by the State on September 21, 1922. It ignored the differential adjustment.

Publication was made in Supplement No. 4 to F. V. Davis, Agent, Ohio, No. 44, effective interstate on January 1, 1925, and intrastate on December 1, 1924.

On publication of the reduced rate, a petition for (1857) suspension was filed with the Interstate Commerce Commission by the Pittsburgh Coal Producers Association. The petition in question and the reply of publishing carriers to the petition are recorded in Interstate Commerce Commission Miscellaneous 15th Section File 442066, December 19, 1924.

The petition for suspension alleged that the rates on bituminous coal from mines in the Pittsburgh District and from competing mines in eastern Ohio, western Pennsylvania, and northern West Virginia to points in eastern and northeastern Ohio were differentially related and were so found to be related in Bituminous coal to Central Freight Association Territory, 46 I. C. C. 166, and in Increased Rates, 1920, 58 I. C. C. 220.

The publishing carriers, including the New York Central Railroad, Pennsylvania Railroad, Baltimore & Ohio Railroad, Pittsburgh & West Virginia Railroad, and Wheeling & Lake Erie Railroad made the following allegations in their reply:

[fol. 1972] "As to the allegations contained in Section 2 of said petition, they deny that this Commission either in Bituminous Coal to Central Freight Association Territory, 46 I. C. C. 66, or in any subsequent decision, fixed the rates on bituminous coals from mines in the Pittsburgh District and competing mines in eastern Ohio, western Pennsylvania and northern West Virginia to destination points in Akron, Ohio, District, or intermediate points, which are the only destination points (1858) involved in the supplements above described, or found or confirmed the rates from said origin districts to the Akron, Ohio, District or intermediate points to be differently related.

"As to the remaining allegations contained in Section 2 and the allegations contained in Section 3 and 4 of said petition, they admit that the carriers have from time to time in certain proceedings before this Commission and the Public Utilities Commission of Ohio assumed that the rates

from the origin districts referred to in Section 2 of the petition to Akron were differentially related to rates from the eastern Ohio coal districts to Akron. As a result of this, the rates from the eastern Ohio Coal fields to the Akron District were increased out of proportion to the rates from the same coal districts to short-haul territory in eastern and northeastern Ohio generally, the various increases to Akron having been based on the higher rates obtaining from the Pittsburgh and Connellsville fields. The carriers now propose to treat the rates from the eastern Ohio coal fields to the Akron district just as the rates to Canton were treated by reason of Akron being located almost on the edge of the eastern Ohio coal fields; and even under this method the resulting rates are as high or higher than other rates in this general territory, as indicated by the fact that if the same formula is applied, for example, to the Pittsburgh-Youngstown rate, or to the No. 8 (1859) District-Cleveland rate, there would be slight increases in these rates.

"The carriers allege that their action in reducing the rates herein involved is for the purpose of removing the artificial control of the rate from the remote Connellsville field over the rate from the eastern Ohio fields, whose geographical location with reference to Akron, so forcefully insisted upon as a major consideration by these protestants in the pending Lake Cargo Coal Rate Case, entitles these Ohio fields to a rate more comparable with the other short-haul rates in the same general territory."

[fol. 1973] (1859) The Commission declined to suspend the published rate and it duly went into effect. In arriving at the reduction down to $1.51, the carriers simply took the rate applicable from Ohio No. 8 in 1917, applied to it directly the advances which followed, as well as the 10 per cent reduction, according Akron, therefore, the same rate treatment that had been accorded Canton.

Regardless of this adjustment, the rate still remained, in our opinion, at an excessive level and some time ago we negotiated further with the carriers with a view of obtaining (1860) a more just and reasonable basis of rates. On August 1, 1932, the carriers, including the Wheeling & Lake Erie Railroad, in compliance with the order of the Public Utilities Commission of Ohio, in Docket 7252, placed in effect reduced rates on coal from the No. 8 District to Canton and Massillon, Ohio.

On the same date, the Wheeling & Lake Erie Railroad placed in effect reduced rates on coal from Wheeling & Lake Erie origin points to Akron, Cleveland, and other points in northern Ohio. The A. C. & Y. Railroad joined in the adjustment established into Akron, a rate of $1.28 being established from the No. 8 District, and the rate purporting to have been made to reflect the basis prescribed by the Ohio Commission in Docket No. 7252.

[fol. 1974] On August 12, 1932, the rate of $1.28 to Akron was made effective from P. & W. V. Railroad origin points in the No. 8 District in connection with the W. & L. E. and the A. C. & Y. Railroads. On August 31, 1932, rates were published, effective as of September 2, 1932, from mines on the Pennsylvania and Baltimore & Ohio Railroads in the No. 8 District to Akron on the same basis, namely, $1.28.

I said that the $1.28 rate from No. 8 to Akron purported to reflect the basis prescribed by the Ohio Commission in Docket 7252. I made that statement for the reason that the rate is in fact above the 7252 basis. In that case the Ohio Commission fixed the Canton and Massillon rates on the basis of the (1861) short haul scale prescribed by the Interstate Commission in No. 23130, involving Illinois Intrastate Rates, and the figure of $1.28 reflects the rate proper for distances of from 100 miles to 110 miles. As shown by my next exhibit, No. 337, consisting of four pages, the proper average distance from mines in the No. 8 District to Akron is between 90 and 100 miles.

(Exhibit 337, Witness McCauley, received in evidence.)

This exhibit is a statement showing short tariff distances from mines on the Wheeling & Lake Erie Railway, Baltimore & Ohio Railroad, Pennsylvania Railroad, New York Central Railroad, and Pittsburgh & West Virginia Railway in the Ohio No. 8 District to Akron.

In the first column, the mileages from a total of 74 active mines are shown in the selection of this particular [fol. 1975] list of mines. We were guided by the Ohio Commission's views as well as the carriers' views as to the proper origin list to be used in computing average mileages and as expressed by the Ohio Commission on page 4 of its report in Ohio Docket No. 7252, Republic Steel Corpora-

tion vs. Baltimore & Ohio Railroad Co., et al. This report is already in the record.

That is the Exhibit 40 in that particular case. In arriving at its findings, the Ohio Commission employed the (1862) list of active mines, shown in defendants' Exhibit No. 40, in the Republic case as being active during the period January 1, 1929, to March 31, 1930.

From the 74 active mines in question, the average short tariff distance to Akron is 98.1 miles as shown on the bottom of page 4 of the exhibit.

In Column 2 of the exhibit I have shown the short tariff distances from mines in the Ohio No. 8 District, described by Witness Kern in the present cases in his Exhibit No. 35 as being active during the period July 1, 1931, to September 15, 1932. The list includes a total of 55 mines. The average short tariff distance from these mines to Akron is 96.3 miles, as shown on page 4 of the exhibit.

In Column 3, I have shown distances from mines active in either or both periods referred to in Columns 1 and 2. A total of 84 mines appears and, from which, the average short tariff distance to Akron is 98.2 miles.

[fol. 1976] (1863) In outlining mileages from W. & L. E. R. R. origins on page 4 of the exhibit, I have, in some instances, shown in parenthesis certain distances after the location point, indicating the actual distance of the mine from the location point shown. In carrier's Exhibit 40 in the Republic Case, these actual distances were used and I have used them in my mileage computations. I might say that I also check the mileages from the active W. & L. E. origins using the mine billing points on the W. & L. E. R. R. appearing in Davis' Tariff I. C. C. 48 and I found practically no variation in the total miles from all 29 active origin points. In both computations, an average mileage of 85.0 was reached.

The mine which we own and operate at Adena is the Wheeling Township No. 2 Mine, which is the 7th or 8th mine on the list of the W. & L. E. mines, shown on page 4. The distance is 86.4 miles.

On page 2 of this exhibit carrying mileages from origin points on the Pennsylvania Railroad, I would like to call attention to the tariff routes from mines located at Folks, Narva and Cadiz. At the bottom of the (1864) page I have shown the distances over the reasonable and workable

routes of the Pennsylvania Railroad to Bowerston, W. & [fol. 1977] L. E. Railway to Valley Junction and the B. & O. R. R. beyond. While I have used the short tariff routes in my mileage calculation, they are approximately 56 per cent circuitous. The reduced rates do not apply via those tariff routes. They are not tariff routes.

[fol. 1978] (1864). My next exhibit, No. 338, is a single page exhibit showing by railroads the total number of tariff origins in the No. 8 district appearing in F. V. Davis I. C. C. 48 as well as the total number of mines at which there was any actual activity during the two periods of time referred to in my preceding exhibit. It will be noted that in the St. Clairsville district on the B. & O. Railroad, for example, while the tariff shows a total of 27 origin points, only 5 mines were actually active in the period January 1, 1929, to March 31, 1930, and only 2 mines in the period July 1, 1931 to September 15, 1932.

(Exhibit No. 338, Witness McCauley, received in evidence.)

My next Exhibit, No. 339, shows the short haul scale prescribed by the Interstate Commerce Commission in Docket No. 23130 for application on intrastate movements of bituminous coal within Illinois for distances up to 130 miles. (1865) The statement also shows the revised scale prescribed by the Commission in a third supplemental report issued on October 11, 1932. The establishment of the revised scale was found necessary in order to restore to carriers coal tonnages lost through motor truck competition or to enable the carriers to retain tonnage threatened by motor truck competition.

[fol. 1979] (Exhibit No. 339, Witness McCauley, received in evidence.)

With the average distance from active mines in the No. 8 district in the 90-100 mile block, the application of the original Illinois scale would produce a rate of $1.22, the revised scale a rate of $1.18. That is against $1.28 which is our actual reduced rate.

In Docket No. 7252, the Ohio Commission said:

"The record fails to show that there are any transportation conditions in Ohio which would warrant the maintenance or continuation of higher intrastate coal rates in

Ohio than prevail in Indiana or Illinois or between Indiana and Illinois, for comparable distances."

In I. C. C. 23130 proceedings, the carriers representing Illinois roads, including the B. & O. R. R., N. Y. C. R. R. and Pennsylvania R. R., compared the rate level on coal in Illinois territory with the level in effect in Central Freight Association territory. On page 54 of their brief they said:

"It will hardly be contended that there are any transportation conditions that can possibly (1866) justify a substantially lower level of rates from the Illinois groups to Chicago than the level of the rates from these producing fields in the East to these great industrial districts in Central Freight Association territory."

In comparing operating statistics of Illinois roads with the operating statistics of Eastern roads, including among others the B. & O., the Erie, N. Y. C., Pennsylvania, [fol. 1980] P. & L. E. and W. & L. E. Railroads, the carriers on page 55 of their brief said:

"It is sufficient to say that from the standpoint of the density of traffic, the operating revenue per mile of road, the tons per train, the cars per train, and the average load per car, these eastern roads occupy a far more favorable position than do the Illinois roads."

The original scale prescribed in I. C. C. 23130 represented a level slightly less than 85 per cent of the Holmes and Hallowell scale. This scale is already in the record, appearing as Exhibit No. 115. The present interstate rate of $1.51, Ohio No. 8 to Akron, is on a basis equivalent to 104 per cent of the Holmes & Hallowell scale for distances 91 to 100 miles.

My next Exhibit, No. 340, is a statement showing the rate scale prescribed in Docket No. 23922 by the Interstate Commerce Commission for application on coal moving interstate from Indiana origin points to destinations in Illinois. For distances (1867) up to 130 miles, the same scale was prescribed as in Docket No. 23130.

Cross-examination.

By Mr. Orcutt:

I cannot say definitely when the Goodyear Tire & Rubber Company purchased the Wheeling Township No. 2 Mine at Adena. It was either during the War, or immediately after.

[fol. 1981] We do not receive any coal from the Connellsville district. We have in times past received some coal from West Virginia, and I think it originated in the Moundsville district. We have not received any coal from outside sources for a period of three and one half years, at least, except that I might qualify that statement by saying that we had a little mine trouble in the early part of this year that lasted for a few days, as far as our particular operation was concerned, and I do not know how much we bought on the outside, but I do not think it amounted to any more than three thousand or four thousand tons (1868), or perhaps five thousand tons. In any event, it was an inconsequential amount.

By Mr. Day:

Referring to Exhibit 337, at page 4, I am asked to explain what the five miles mean after the location of our Wheeling Township No. 2 Mine. In Exhibit 40, in the Republic Case, Mr. Kern used mileages from the W. & L. E. origins that he had obtained, as he testified, from the Wheeling & Lake Erie Railroad. The distance of five miles after the word "Adena" indicates evidently that the Wheeling Township No. 2 Mine is located five miles from the location of the billing point, Adena. The distance from the billing point to Akron is 81.4 instead of 86.4, as I have shown. There is no town or village located at the point where our mine is located, and in the distance tariffs of the Wheeling & Lake Erie Railroad it is simply shown as [fol. 1982] the Wheeling Township No. 2 Mine.

(1869) Concerning the reduction that I said was made voluntarily by the carrier to Akron on December 1, 1924, we had negotiated with the carriers for a reduction. We were not satisfied with the rate of $1.57 and we sought a further reduction. In our opinion, at that time, we felt that the rate of $1.57 was excessive and when it was reduced

to $1.51 we did not feel at the time that it had been reduced to its proper reasonable level. The $1.51 is the rate that the carriers agreed to establish. I do not think that we asked the carriers to establish that figure at all. I do not think that we set any particular figure at all.

The passages I quoted from the answer filed by the carriers to a petition for suspension of the reduced rate of $1.51 was from the reply that was filed by all five railroads. It was filed by Mr. Martin, of the Wheeling & Lake Erie, for the five railroads that are mentioned in my testimony. (1870) I think the Wheeling & Lake Erie at that time was mainly responsible for the reduction.

[fol. 1983] W. R. HUBBARD was called as a witness, and having been duly sworn, testified as follows:

Direct examination.

By Mr. Ballard:

(1871) W. R. Hubbard, Transportation Manager, Akron Chamber of Commerce, Akron, Ohio. My duties are to attempt to secure for Akron lawful and proper rates and adequate transportation service.

I have held that position for three years. Prior to that time I was Traffic Manager for the Cleveland Union Stockyards Company for about three and one-half years, and before going to Cleveland I was with the American Railway Association in the capacity of aiding in the organization of the Great Lakes Regional Advisory Board. Prior to that I was Assistant Transportation Commissioner of the Toledo Chamber of Commerce and prior to that in railroad service. My transportation experience covers a period of twenty years, during most of which time I have been directly concerned with rates and traffic matters.

The Akron Chamber of Commerce is an organization not for profit, organized for the purpose of promoting the civic and industrial development of Akron, Ohio and vicinity. Virtually all the manufacturers and important coal dealers in Akron are members of this association.

(1872) In the five cases now on hearing, that is, the 13th Section Case and the four complaints, the Akron Chamber

of Commerce has only one interest, and that is to prevent [fol. 1984] any increase in the rates from the Ohio districts to Akron above a maximum reasonable level.

For many years Akron has contended that its rates from the Middle and No. 8 fields were too high. They have never been related to the rates from the Pittsburgh or other interstate districts. This fact has been substantiated by Witness Kern several times in this proceeding and in the Republic Case before the Ohio Commission. The record in the Ohio Case is Exhibit No. 129 in this 13th Section proceeding. To apply the expression Mr. Kern used in the Republic Case, Akron is in "No Man's Land," in that its rates from Eastern Ohio are not related in any manner to any of the various interstate producing coal fields. This phase of the situation was dealt with in the instant proceeding by Witness McCauley and I heartily subscribe to his statements in the matter.

Akron is recognized as the rubber manufacturing center of the world. The normal consumption of coal by the Akron rubber manufacturing plants alone exceeds a million tons annually. The transportation cost of coal is, therefore, (1873) an item in which all of the rubber companies are vitally interested.

[fol. 1985] I now desire to give some figures concerning the Akron rubber industry measured by rate of operation.

From 1929 to 1932 the unit volume of tire production declined from 42,556,000 tires to 20,280,000 tires, or 52 per cent. With respect to the other rubber products the figure would be much greater.

This indicates the extent to which the Akron rubber industry has been deflated as a result of the depression. This process has of necessity been accompanied by drastic economies in wages and raw material costs. I cite these facts with respect to the condition of the rubber industry for the purpose of showing that it cannot bear higher than maximum reasonable rates on its fuel.

Akron has consumed an annual average of 2,426,098 tons of coal for the past six years. Its industries require no by-products or special purpose coal whatever. The coal produced in nearby Ohio coal fields serves our purposes adequately. Akron accordingly insists upon its rights to secure its fuel from these nearby producing districts, at rates not higher than maximum reasonable rates, regard-

less of their relation to or effect upon the interest adjustment. The rates from the nearby Ohio fields here under (1874) investigation are higher than those prescribed by the Interstate Commerce Commission in Docket No. 23922, which rates meet our views as to maximum reasonableness. [fol. 1986] A restoration of the former rates would inflate Akron's transportation bill on coal to the extent of many hundreds of thousands dollars annually and we earnestly protest against any reestablishment of excessive freight rates that burden our industries, our institutions and our domestic consumers.

Akron, as a consuming community, is in a position in this case where it is interested in only one thing, and that is the maintenance of maximum reasonable rates from its main producing field in Ohio. I have shown, and Mr. McCauley has shown, that the rate from that field is not related to the interstate adjustment.

(No cross examination.)

[fol. 1987] Testimony taken at Washington, D. C., January 12, 1933

Direct testimony of Andrew H. Brown:

(1875) I am Andrew H. Brown, of Cleveland, Ohio. I represent the Cleveland Chamber of Commerce, an Ohio corporation, having between four and five thousand members, among whom are representatives of practically every industry of the City of Cleveland. The purpose for which the Cleveland Chamber was organized and today exists is stated in our Charter as being "to foster, protect and advance the commercial, mercantile and manufacturing interests" of the city.

I have been Assistant Transportation Commissioner for the Cleveland Chamber of Commerce for over thirteen years. Before that time (1876) I spent some seven years with the Lake Shore & Michigan Southern and the New York Central Railroads, in the operating and traffic departments. During all of the time I have spent with the Chamber of Commerce the problem of rates on coal, particularly from the eastern Ohio districts, has been constantly before us, and I have appeared before the Public Utilities Com-

mission of Ohio and the Interstate Commerce Commission in proceedings involving them. I find from examination of our files that the Chamber of Commerce has been actively [fol. 1988] interested in these rates since 1912, and possibly long before that time, though I have been unable to go farther back than that year. At no time has any of our transportation committees been satisfied with the level of the rates from the No. 8, No. 6, Middle and Massillon groups or its relative relationship to the rates applicable from other steam coal fields to competing destinations. We have filed no complaints attacking these rates, but complaints have been in contemplation several times in the last 13 years, and we have endeavored to persuade the carriers serving the No. 8 District to make a voluntary adjustment.

Cleveland is a city of highly diversified industry and, as an industrial community, is in direct competition with almost every other producing center in the United States, particularly those located in and on the border of Central Freight Association territory.

(1877) This competition between communities was dealt with at some length by some of the carrier witnesses, although their emphasis was almost entirely with respect to iron and steel. As a matter of fact the competition of industrial communities is much broader than that, and in order to ascertain the nature of competition met by Cleveland shipping interests I have examined the reports of the [fol. 1989] biennial census of manufacturers for 1929 and 1927, and that study verified my general knowledge of the parallelism between industries in Cleveland and those in other cities. Cleveland is in competition with Chicago and other points in the States of Illinois, Indiana, Michigan, and such cities in Ohio as Youngstown, Toledo, Massillon, with Buffalo and Detroit, and so forth. An examination of the census reports discloses that there is no major form of industrial occupation in Cleveland which is not also a substantial industry in Illinois.

The record contains sufficiently complete information as to the total volume of Ohio coal shipped to Cleveland to indicate the extreme importance of this particular set of rates. The record also shows present rates and rate bases prescribed by this Commission from coal producing areas to competing communities in Indiana and Illinois. Exhibits 114 and 142 show the scale prescribed in Docket 23922 from

Indiana to Illinois. Exhibit 137 shows rates from certain Illinois groups to Davenport, Ia., Moline, Rock Island, and (1878) Chicago for distances comparing well with those from the No. 8 and Middle Districts to Cleveland. It is obvious from these exhibits that Chicago, East St. Louis [fol. 1990] and points similarly located enjoy entirely different and lower rate bases from adjacent producing districts, than Cleveland did under the rates which applied prior to August 1, 1932.

For example, there is the rate from the Danville Group to Chicago, for a short tariff distance of 135 miles, of $1.35 per ton. The Danville Group is reasonably comparable in its relation to Chicago with the No. 8 group to Cleveland, yet the rate prescribed by the Commission was 10 cents lower than the rate under attack in the 13th Section case here. The rate from the Peoria Group to Chicago is $1.43 for distances of 155 or 178 miles dependent on the method of figuring mileages. Mr. Kern's mileage Exhibit No. 36 shows the average of all tariff routes from active mines in the No. 8 District to Cleveland to be 151.6 miles and the present intrastate rate is $1.45. Similar comparisons may be made with reference to rates from the Middle District to Cleveland.

Kern's Exhibit No. 47 shows that during the eight years, 1924 to 1931, inclusive, there was an average of 1,425,914 tons of coal from No. 8 to Cleveland, and during that period the rate applied was $1.74, making a total annual freight [fol. 1991] charge of $2,481,090.36. Had the consumers in Cleveland (1879) enjoyed the present rate of $1.45 which is fairly comparable with the Indiana-Illinois rates they would have been required to pay an average of $413,515.06 less than they actually did pay. It is unnecessary to multiply examples.

The record is already well supplied with testimony establishing the propriety of the rates under investigation in the 13th Section case, and I have few additional comparisons to suggest. Among other communities, sharply competitive with Cleveland, are those located in the Youngstown District such as Youngstown, Niles, Warren, etc. Primarily, that competition is in the manufacture and sale of iron and steel articles, in connection with which the use of coal is extremely important.

Witness Kern's Exhibit 57 shows an extremely heavy movement of coal from the Connellsville District to the Youngstown Group, ranging from a maximum of 4,780,436 tons in 1923 to a minimum of 1,763,739 tons in 1931. Mr. Kern's Exhibit No. 68 shows an average distance from active mines in the Connellsville District to the Youngstown Group of 147.6 miles. In I. & S. Docket 3282 respondents established 99 miles as reasonably representing the average haul from the Pittsburgh District to the Youngstown Group, and in I. & S. 774 the Commission was con-
[fol. 1992] vinced that the Connellsville Group was 41 miles more distant than Pittsburgh from Youngstown. This would establish 140 miles as the Connellsville-Youngstown (1880) distance. A calculation I have made from Mr. Ackerman's exhibits results in a minimum average distance of 141.7. The applicable rate is $1.42 per ton.

Mr. Kern's Exhibit No. 36 shows an average distance from active mines in the No. 8 District to Cleveland of 151.6, which appears reasonably comparable with his computation of 147.6 miles from Connellsville to Youngstown. Distances via short tariff routes of under 140 miles from No. 8 to Cleveland, shown by other witnesses, are also reasonably comparable with the minimum average distances from Connellsville to Youngstown. The present rate from No. 8 mines to Cleveland is $1.45, or 3 cents higher than the Connellsville-Youngstown rate. The development of that rate from the Youngstown Sheet and Tube Case, 29 I. C. C. 428, and I. & S. 774 already appears of record.

Another indication of the propriety of the present rate to Cleveland is found in the development of the ex-lake ore rates as compared with coal. Before July 1, 1917, the
[fol. 1993] line haul rate on ore to the Youngstown-Canton Group was 50 cents and to Pittsburgh 76 cents per gross ton, quoted in P. R. R. I. C. C. F-642. At the same time the No. 8 to Cleveland coal rate was 90 cents per net ton, quoted in Davis' I. C. C. 40. Now the ore rates are 82 cents to Youngstown and Canton and 115 cents to Pittsburgh, as per P. R. R. Tariff I. C. C. F-1951, and the No. 8 to Cleveland coal rate is 145 cents per net ton, in Davis' I. C. C. 48. (1881) Before August 1st this year that rate was $1.74.

Thus the ore rates have been increased 28.57 cents per net ton to Youngstown and 34.82 cents to Pittsburgh, while the coal rate to Cleveland has been increased 55 cents. In

percentages the ore rates to Youngstown and Pittsburgh were advanced 64 and 51.3 per cent, respectively, and the Cleveland coal rate 61.1 per cent. On the basis of the $1.74 rate on coal, sought to be restored through a minimum rate order in this case, the Cleveland coal rate would be advanced 84 cents per ton, or 93.3 per cent in the last 15 years. The disproportionate increase in the coal rate prior to August 1st is quite obvious both in cents and percentage. The present $1.45 rate is about in line in percentage, but even it carries a relatively heavy load of increase in cents per ton.

[fol. 1994] In addition to what might be termed the general and industrial interest of this rate adjustment in Cleveland is the public and semi-public interest, that is to say, the use of coal moving under the rates under attack to governmental and charitable agencies. I have made some investigation of that subject and I find that the Associated Charities in Cleveland has under contract 75,000 tons of coal to move under these rates in the cold weather period which will not end until next May. The School Board has (1882) contracted for 48,900 tons to be consumed by Cleveland schools during the school year ending next June, and the City of Cleveland has contracted for 11,500 tons to be used in substantially the same period. In all, these contracts provide for the movement of approximately 135,000 tons of coal for these particular agencies, and I am assured that the amount required by the Associated Charities will actually exceed the contract figure by not less than 15,000 tons. The contracts which I have inspected provide that delivered prices shall vary with changes in the legally applicable freight rates, so that the general Cleveland public through taxes and charitable gifts will bear any charges which may be made to apply on coal shipped to these agencies in Cleveland.

[fol. 1995] The Commission in I. & S. Docket 774, 46 I. C. C. 66, said at page 113: "Except for the Michigan complainants and protestants, the consumer is not here and has not been heard in this proceeding." Not only was that the fact in that case, but it is also true that the coal rate structure, as it applies to the Cleveland area and is under investigation in Docket 25566, has been governed almost entirely by considerations other than those of the interests of consuming centers. The decision of the Public

Utilities Commission which led to this case was the result of a complaint from a coal consumer, and the consumer interest cannot be here overlooked.

[fol. 1996] Cross-examination.

By Mr. Bull:

(1883) Cleveland, as I represent the Cleveland Chamber of Commerce, is a party only to the 13th Section investigation, and it is our position that the present rates as they apply from the eastern Ohio Districts are not lower than reasonable maxima, and that it is our right to have rates from those fields on a level not higher than they now are.

With respect to our position as to the rates from the interstate territory involved in that proceeding, I have received no directions and no authority from my people to speak with regard to the differentially related rates.

I said that certain municipal and public and charitable organizations had placed contracts for a certain number of tons of coal in the Ohio districts. It will move at the reduced rates. (1884) That is, it was to move on the reduced rates, provided they continued to the end of the contract.

Some of these contracts were placed after the rates were reduced. I do not know as to whether those which were placed prior to the time the rates were reduced were placed with the knowledge that there was an effort being made [fol. 1997] to reduce the rates, or not. I do not know where those organizations placed their contracts last year, that is, for the season 1931-1932. I think that there was probably a somewhat larger proportion of the coal purchased outside the State of Ohio than was purchased this year.

By Mr. Armstrong:

Most of the 75,000 tons that I spoke of, that the Associated Charities in Cleveland contracted for, came from No. 8, and some of it from No. 6. (1885) The Associated Charities distributes that coal to the families on their list which are in need. The coal is purchased through certain large retailers on a delivered basis—delivered to the families—to these needy families in the City of Cleveland. The contract provides for the delivery of it.

By Mr. Fitzpatrick:

It is true that I took a definite stand as to the reasonableness of the eastern Ohio rates. Once given a reasonable rate from these eastern Ohio districts, it is my personal opinion that the other rates must fit in where they belong. That is a matter of concern for others than ourselves.

(1886) I see no reason for a higher or lower level within Ohio than interstate within the same territory.

[fol. 1998] When I used the term "No. 6" in my first answer, I meant the district from which our rate for years was $1.54 and has since been reduced to $1.22.

By Mr. Gutheim:

Our concern in the No. 8 rate is that we have for years regarded those rates as being unduly high. That is a concern as consumers of coal. It is true that we consume a great deal of other coal than Ohio No. 8, and as consumers of that coal we have an interest in the rates thereon—but not in this proceeding.

(1887) I have known from the very commencement in this proceeding that there were complaints here which attacked the rates from western Pennsylvania mines to Cleveland as unreasonably high. Our organization has a concern, doubtless, in that issue; but it has not been studied, nor have I been authorized to intervene in or speak on those complaints. The reason why the Cleveland Chamber of Commerce has no official interest in this proceeding except with respect to the Ohio rates is because when this was considered the 13th section investigation was under way, and I will say that the complaints had not been brought to the attention of our committee at that time. What their position would be, I do not know.

[fol. 1999] The complaints have not been before our governing committees of our organization, because I have not been in Cleveland since December 5th, except for a day or two.

(1888) If the Commission should approve as a reasonable rate the $1.45 rate from the Ohio No. 8 District, since the consumers at Cleveland use not only Ohio No. 8 but Pittsburgh and other coal, they would have an interest in securing similar reasonable rates from the other districts, including Pittsburgh.

Right at the moment I do not think of any formal proceeding in which I have urged the maintenance of origin relationships. I did not testify to that effect in I. & S., Docket No. 3282. We testified there as to the maintenance of destination relationships, as I recollect it. In that case we urged the maintenance of such relationships. (1889) The issues were such that I felt that we could not bring in the full Cleveland situation. That being true, the only thing I could do was to say that the 50 cents which Cleveland was then paying over Youngstown should be continued. I explained that on oral argument.

[fol. 2000] I have not changed my position. In this case I am not insisting on the maintenance of 50 cents over Youngstown, nor am I insisting on the maintenance of the cents per ton difference which previously existed, Cleveland over Akron and Canton. I am not taking a different position than I took upon the former occasion with regard to Cleveland's relationship to Youngstown. In that case, had the issues been broad enough, I would have been glad to urge the establishment of a different relationship. I did urge, in that case, the continuance of that relationship and for the reason I explained.

(1890) I am asked if I advocate a destruction of destination relationships in this case. Where a reasonable rate level would destroy them, I would say yes. As to whether I advocate a mileage scale of rates, I think that your rates must ultimately be based or made with some relationship to mileage. Now, whether that mileage scale should be applied literally and absolutely, block for block, might be another question. I would say probably not there. I think that in the practical application of any mileage scale you must have variations to allow for practical considerations.

[fol. 2001] (1891) I was present here and heard the testimony of Mr. Richards, with regard to a conference with a certain board of our Chamber of Commerce. I was not present at any of those conferences. I might explain that the Retail Coal Merchants' Board is a semi-independent organization, with its own directors and its own treasurer; but the office is next door to mine. It relates to the retail coal dealers of Cleveland. The only thing I can say about Mr. Richards' testimony is that I did not know the figures had been presented to them in the form they had been, or I would have had them myself. As to the consumption

of low volatile coal in the Cleveland area during 1931, it is the same as it was reported to me by the same organization.

(1892) It is true that when I testified in I. & S. Docket No. 3282 we were concerned primarily with the relationship of the rates, and not with their level. I disclaimed any purpose to say anything with regard to the level of the ex-river rates. At that time what we were really interested in was the relationship.

I did not say that the City of Cleveland bought coal for charitable purposes, I said the Associated Charities. The coal I mentioned was all Ohio coal. About forty to forty-five thousand tons came from No. 8 and the remainder from No. 6, the Middle District. So far as I know the Associated Charities has bought no coal outside of Ohio this year.

[fol. 2002] GEORGE K. SMITH was called as a witness, and having been duly sworn, testified as follows:

Direct examination.

By Mr. Armstrong:

(1893) George K. Smith, Columbus, Ohio. I am president of the Sunday Creek Coal Company. I have been connected with that company a little over 24 years, and before becoming connected with it I was in the coal business for about 5 years. My whole experience covers a period of about 29 years.

In addition to the Sunday Creek Coal Company, I am speaking here for the New York Coal Company, the Ohio Collieries Company, the Essex Coal Company and the Black Diamond Coal Company.

(1894) In order to avoid a duplication of the record and to present our position in the briefest form I have prepared the following statement:

I do not regard it necessary to refer to the history of the various rates which are now in effect for the reason that all of that has been presented by other witnesses.

The five companies for which I am testifying are all producers and shippers of bituminous coal in what is known as the Hocking District in southern Ohio. Some

of them also have one or more mines in the Crooksville District. The principal production, however, of each of [fol. 2003] these companies is in the Hocking District, and mines are located as follows:

Mines of Interveners

	Mine number	Location
Hocking District:		
New York Central Railroad		
The Sunday Creek Coal Co	9	Rendsville, Ohio
"	6	Millfield, Ohio
"	90	Carrington, Ohio
"	119	Millfield, Ohio
"	24	Doty, Ohio
"	87	Jacksonville, Ohio
"	65	Millfield, Ohio
"	219	Congo, Ohio
(1895) "	107	Carrington, Ohio
Ohio Collieries Company	255	Doty, Ohio
"	267	Hunterdon, Ohio
New York Coal Company	25	Chauncey, Ohio
Black Diamond Coal Company	50	Lathrop, Ohio
Crooksville District:		
New York Central Railroad		
New York Coal Company	51	Tropic, Ohio
"	52	" "
Hocking District:		
Chesapeake & Ohio Railway		
The Sunday Creek Coal Company	5	Murray City, Ohio
"	10X	Orbiston, Ohio
"	30	Murray City, Ohio
The New York Coal Company	Lick Run	Nelsonville, Ohio
Essex Coal Company	Kimberly	Floodwood, Ohio
"	Eclipse	Hocking, Ohio
"	Lost Run	Greendale, Ohio
Jackson District:		
Baltimore & Ohio Railroad		
The Sunday Creek Coal Company	2	Carbondale, Ohio
New York Coal Company	Luhrig	Luhrig, Ohio

[fol. 2004] (1896) Each of these companies produces what is generally known as Hocking Coal. It is a general purpose steam and domestic coal but not a special purpose coal in any sense. In northern Ohio it comes in keen competition with coal produced in the No. 8 and Pittsburgh Districts and other districts which produce steam and domestic coal. One of our principal markets for this coal for many years has been in the territory in northeastern Ohio, especially Cleveland and vicinity. Our other principal markets are in northwestern Ohio, northeastern Indiana and southern Michigan where we come in keen

competition with coal from the Inner Crescent and also from other producers. Our most important single market for domestic coal in northeastern Ohio is Cleveland, to which we shipped in 1931, 100,631 tons. Of this tonnage 77,139 tons were lump coal, 6,148 egg, 4,148 washed egg, 10,227 washed nut, and 2,969 nut, pea and slack.

To Lorain the Hocking District shipped, in 1931, 1,695 tons. In 1930 it shipped to Lorain 4,517 tons.

To Akron the Hocking District shipped 2,231 tons in 1931, and 10,628 tons in 1930.

We shipped nothing to Canton, Massillon or to points in (1897) northeastern Ohio, east of Cleveland, in 1930, [fol. 2005] 1931, or 1932, except a small tonnage to Willoughby in 1930 and 1931, which is included in the Cleveland tonnage, and 712 tons to Painesville in 1930.

Kern Exhibit No. 51 shows that in the year 1926, the Hocking District shipped 25,558 tons to Akron. In 1927 it fell to 4,985 tons; in 1928 to 3,663 tons; 1929—9,851 tons; 1930—10,628 tons; in 1931—2,231 tons.

It is apparent from this exhibit that if the crescent lost tonnage to this district, it has not lost to Hocking.

In order to produce the domestic coal which we shipped to Cleveland it was necessary to mine approximately 300,000 tons of coal. Of this 300,000 tons the smaller sizes were disposed of any place where we could find a market for them, on a rate that would move them.

I want to call the attention of the Examiner specifically to our geographical location and the difficulties which we encounter in the sale of our product. A glance at the map showing the location of the various coal fields which compete in the territory involved in this hearing discloses that we are surrounded with large producing districts. We are hedged in by producers on the east, south and west so that we are barred from Ohio markets in all directions except to the north, northeast and northwest, and to certain [fol. 2006] portions of central Ohio. This Commission recognized our (1898) difficulties and in Bituminous Coal to C. F. A. Territory, 46 I. C. C. 66, at page 127, the Commission, in speaking of the southern Ohio operators, said:

"Their mines have no outlet by river. Their coal is barred from going east and south by the Crescent Coal; on the west are Indiana and Illinois Coals; and under the

present adjustment of rates they have to a very large extent been driven out of Michigan by the sharp competition of the more distant West Virginia and Kentucky Coal."

This fact was again emphasized by this Commission in Ohio-Michigan Coal Cases, 80 I. C. C. 663, in which on page 683 the Commission said:

"Complainants mines in Southern Ohio are in what might be called a pocket so far as markets outside of Ohio are concerned. This was recognized in the original decision which pointed out that Ohio coal is barred from the Eastern and Southern markets by Crescent Coal, which is superior in quality and which enjoys the benefit of closer proximity to those markets, while on the west it comes in competition with Indiana and Illinois coals."

We are in a pocket not only in so far as markets outside of Ohio are concerned, but also as to markets inside of Ohio. We have as keen competition from the Crescent [fol. 2007] coals in the Ohio markets as we have to interstate markets. And to the north we have to meet competition from coal producing districts (1899) in eastern Ohio and western Pennsylvania as well as from the Crescents. But for the fact that rates on bituminous coal in Ohio have long been fixed upon a competitive basis, we would be barred from the north and northeastern Ohio markets in non-affected differential territory. As to the method of making rates, which has long been in use in Ohio, we quote the following from the decision of the Ohio-Michigan Coal Cases heretofore referred to, at Page 685, as follows:

"The testimony in this proceeding recites the history of the coal rate adjustment as between Ohio and the Crescents; it indicates that coal rates from these districts have always been based mainly on the group principle without much regard to distance. In fact, the rates from coal producing fields in Ohio are based upon the same group principle, and distance from the different producing points within Ohio is not there controlling. The range of distance between the nearest and farthest producing points in Ohio from which the same rates apply is as great in some instances as the range of distance between certain producing points in Ohio and points in the Inner Crescent."

[fol. 2008] Again on page 666 in speaking of all of the rates involved in that case the Commission said:

"Rates from all the producing districts are made upon the group principle. As between the Ohio, Inner Crescent and Outer Crescent Districts, the rates from each bear an important (1900) relation to the rates from the other."

At page 122 of the original decision (46 I. C. C. 66), the Commission said that "competitive conditions primarily determined the measure of the differential between Pittsburgh and Ohio mines when it was originally at 25c." They then discuss the history of the relationships as new districts were established, and say that rates were extended to them "in practical, if not absolute, disregard of distance and all transportation conditions that ordinarily are taken into consideration in the making of rates".

In Lake Cargo Coal Rates, 46 I. C. C. 159, which involved rates from Ohio and adjoining states to Lake Erie ports for trans-shipment by vessel, the Commission, at page 188, said:

"While there would appear to be some justification for somewhat higher rates from certain of these Ohio districts [fol. 2009] than from the No. 8, no complaint was made of the grouping and no change therein was suggested and under the circumstances we see no reason for disturbing it."

The Commission in that case approved the same rates from Cambridge, Hocking, Jackson, Pomeroy and No. 8 Districts to the lake ports, regardless of the differences in distance.

We call attention to the fact that while the Commission approved the same rates from all southern Ohio Districts as from the No. 8 District on lake cargo coal to the lake ports, regardless of distance, with the mere suggestion that there (1901) would appear to be some justification for a somewhat higher rate from certain of these districts than from No. 8, there is a 15-cent per ton higher rate from these southern Ohio districts than from the No. 8 District on coal other than lake cargo coal to Cleveland.

For many years prior to the war-time increase, this difference was but 10 cents. After the variation in rates

during and following the World War, it became on September 27, 1923, and now is 15 cents per ton. Our business has been built up on that basis and much of our investment was made on the faith that rates in Ohio would continue to [fol. 2010] be made in the future as in the past upon the competitive basis, which would permit us to retain a fair share of business in those northern markets.

On September 27, 1923, the difference between the rate from the Hocking and Crooksville Districts, and the rate from No. 8 District to Cleveland, Ohio, became 15 cents per ton, and has remained so ever since until disrupted by the publishing of the lower rate effective August 1, 1932, by the Wheeling & Lake Erie Railway Company from mines on its line in the No. 8 District to Cleveland, which made the rate from No. 8, 44 cents per ton lower than the rate from the Hocking and Crooksville Districts to said destination.

Mr. Kern testified that the rate from the Hocking and (1902) Crooksville Districts to Cleveland, which became effective September 27, 1923, was the result of the decision of the I. C. C. in Ohio-Michigan cases.

The effect of what the Ohio Commission did in its order of September 15, 1932, against which complaint is made by the carriers, was to restore the 15-cent per ton difference between rates from Hocking and Crooksville Districts on the one hand, and the No. 8 District on the other. In other words, we were restored to the same relative position, with reference to the No. 8 rates to Cleveland, which we occupied [fol. 2011] prior to the publication of the reduced rates by certain carriers from the No. 8 district, on August 1st, August 12th and September 2nd, 1932.

From what I have said with reference to our location, and from what this Commission has said in the extracts quoted from its decisions, it is evident that we are wholly unable to market our coal to points in Ohio north and northeast, unless we have rates which will preserve relationships or differences at least as favorable as those we now have.

For at least ten years prior to 1917 the rates from the Hocking District were 10 cents per ton over the rates from No. 8 District to Cleveland and other destinations in that vicinity. From 1917 to 1922 the differences in rates varied with the increases and decreases during and following the

World War. The decision in Ohio-Michigan Coal Cases was announced June 8, 1923.

(1903) On September 27, 1923, the difference became 15 cents per ton, and has remained at 15 cents, except for the short period in 1932, between the date of the reduction of the rate from No. 8 and Middle Districts to Cleveland and vicinity, and the action of the Ohio Commission on the 15th day of September, 1932, following which the carriers, [fol. 2012] on September 29th, restored the 15-cent per ton difference or differential. During the month of August and until the 29th of September, 1932, the difference was 44 cents per ton.

Immediately after the reduction of the rate from Middle and No. 8 Districts to Cleveland, many of the dealers who had handled our coal for years in Cleveland and vicinity notified us that they could no longer handle our coal unless the former relationship was restored.

As illustrating the effect on our business of the difference in rate between the No. 8 and Hocking Districts to Cleveland and vicinity, we call the Commission's attention to the following facts:

The lower rate from No. 8 and Middle Districts, from points on the Wheeling & Lake Erie Railroad to Cleveland, became effective August 1, 1932. On Pittsburgh & West Virginia Railway on August 12.

On September 2, 1932, the lower rate from points on the B. & O., New York Central and Pennsylvania Railroads to Cleveland became effective.

(1904) The lower rates from the Hocking and Crooksville Districts to Cleveland did not become effective until September 29, 1932, owing to the delay in publishing the [fol. 2013] tariffs. So that between August 1 and September 29, certain producers in the No. 8 District had a rate to Cleveland and vicinity which was 44 cents per ton lower than the rate from Hocking and Crooksville Districts.

Between August 1 and September 1, these five companies shipped but 19 cars to Cleveland. Between September 1 and September 28, they shipped but 6 cars to Cleveland. On September 29, the day on which the 15-cent difference in rate was restored, they shipped 40 cars to Cleveland on orders which accumulated between September 15 and 29. During the month of October they shipped 177 cars to Cleveland. During the month of November they shipped

170 cars to Cleveland. In October, 1930, they shipped 349 cars to Cleveland; in October, 1931, 214 cars to Cleveland. In November, 1930, they shipped 291 cars to Cleveland, and in November, 1931, 137 cars to Cleveland.

In August, 1929, we shipped 101 cars; in August, 1930, 112 cars, and in August, 1931, 53 cars.

[fol. 2014] (1905) We used the dates September 15 to 29 in our statement because September 15 was the date when the Ohio Commission announced its decision in regard to our rate and that was the date on which we began to meet with some success in soliciting orders at that point.

I was present yesterday and heard the testimony of Witness Sprague that the Hocking tonnage to Cleveland would not be effected if the Wheeling rate were not reduced to meet the No. 8 reduction. I think what I have said pretty well answers that statement, so far as we are concerned. We were convinced by our dealers that our coal would not move to Cleveland on the set-up which was in effect at that time, and the fact that they did not take the coal, to my mind, pretty well proves that they meant what they said.

If we had lost the Cleveland market, there were no other markets open to us in which we could have sold the tonnage which moves to Cleveland, and we would have lost that business; and also we would have lost the tonnage of resultant grades which comes from the production of the lump coal sold in that market. Our production would necessarily have been curtailed to that extent and many of our employees would have (1906) been thrown out of employment.

The companies for which I speak have large investments in their mines. They produce a good quality of coal for [fol. 2015] steam and domestic purposes, and some of these mines have been in operation for more than 20 years and have a reserve acreage for a further life of many years. Our experience has shown that we cannot successfully compete in northeastern Ohio on a greater difference in rate than that now in effect. Any action of this Commission in this case which would result in increasing our difference in rates to Cleveland and vicinity would deprive us of this market.

Our position in this case is similar to the position of the Southern Ohio Coal Exchange, of which we were a part, in

the Ohio-Michigan Coal Cases. While we are interested in the level of the rate, we are more interested in maintaining proper relationships to the rates from other producing districts to common markets in this territory. In former years we sold our product in wide markets and in very large volume, but by the various readjustments of rates and the development of other coal fields we have been deprived of most of our distant markets, and unless we can retain a fair share of business in the territory we now serve we cannot continue to operate at all.

We call the attention of the Commission to another obstacle we encounter in the marketing of our coal and that is, the (1907) large and ever increasing tonnage of bitumi- [fol. 2016] nous coal which is being moved from southern Ohio by truck, thereby greatly affecting the short, haul markets upon which the Hocking shippers must exist, and especially in the event that the distant markets now enjoyed by us should be further curtailed by any rate readjustment.

We have made a careful check of the number of operations supplying coal by truck delivery from southern Ohio This investigation is not entirely completed as to Morgan County, but we find that in Athens, Hocking, Perry and Muskingum Counties, and in Meigs and Gallia Counties, and Jackson and Vinton Counties, there are at the present time 472 small truck mines, employing a total of 2,126 men, and having an average daily capacity estimated at 10,368 tons.

For many years there have been a few small house coal mines delivering coal to residents of the coal mining districts, where there were no coal dealers having yard facilities and where the railroads did not ship coal in carload lots.

In some instances these operations were encouraged by the operators for the purpose of supplying fuel to coal miners in territory near the mines, so that it would not be necessary to interfere with the operation of railroad mines, by using wagon chutes for taking care of this trade; and I should say that the average haul of this coal was [fol. 2017] formerly not more than 5 miles, and was mainly as I have said, to coal miners (1908) and to towns right in the mining district, or to people who lived back in the country but fairly close to the mines.

We now find that truck coal is being delivered in large and ever increasing quantities in such cities as Zanesville, Newark, Lancaster, Baltimore (Ohio), Washington Court House, Circleville and Chillicothe; that it is coming in large volume into the city of Columbus, and to Delaware, Westerville, Marion and Kenton, and we get reports from our dealers of the movement of truck coal into Springfield and Dayton, so I conclude it is safe to say that the volume is steadily increasing and is now covering a radius of about 150 miles from our mines. In some cases coal has been trucked much longer distances by truck operators who had merchandise from distant points to deliver in the mining region, and took back a load of coal, and there is some evidence of this practice spreading. Within a radius of approximately 150 miles there is a steady movement in large volume by truck. It has become a serious menace not only to the coal industry, but to the revenue of the carriers as well.

I am reminded that the witness Ireland testified yesterday, in cross-examination, that his investigation showed that these truck mines were restricted to small wagon mines. I know of a number of instances where mines which [fol. 2018] have rail sidings are now (1909) catering to the retail trade, and there is some evidence of that spreading in our district.

I wish to say further that we are not here seeking to secure any basis of rates which will deprive the carriers of needed revenue. We did not precipitate this controversy. It was thrust upon us. We are attempting only to hold our place in our few remaining markets. The present rate structure was built on a competitive basis. The industry has grown up under that system of rate-making, and investments have been made upon faith that it would be preserved in the future as in the past. We insist that any changes in this great rate structure which has been built up over so many years should be brought about by a general investigation, as wide in scope as the investigation in the Ohio-Michigan cases, considering all origins and all destinations, and that it not be done piecemeal and by the use of various bases.

Cross-examination.

By Mr. Younger:

In Cleveland, our coal, being in the nature of a popular priced coal, competes more with coals in that range, and I mean by that the coals which come from the eastern Ohio District, that is Ohio No. 8—not Cambridge; Ohio No. 8 not Cambridge, but the Middle District; (1910) and I think [fol. 2019] we encounter some competition from Pittsburgh and Connellsville for domestic coal.

It is our position that the relationship of rates from these competitive districts must be continued. It is 15 cents a ton higher than Ohio No. 8 now; our position is that it should be 10 cents. I don't know how much greater the distance is from Hocking than from Ohio No. 8. That is a competitive relationship, and one not governed by distance.

We have not been able to persuade ourselves that a mileage scale of rates would be a proper scale of rates for our district to enable it to continue its competition; but we are certainly persuaded, if any such scale of rates is going to be used, that it should not be used in a small portion of the territory that we serve and we be continued on a competitive relationship in the rates to our territory. (1911) To this particular territory we are not advocating a mileage scale.

For many years our position has been that in the application of these rate advances and decreases considerably less than justice was done to the Hocking District. In other words, our rates were increased by greater percentages than were the rates from other producing districts. If this Commission were willing to go back, say, to 1917 and apply [fol. 2020] all these rates advances and decreases by an exact percentage, we would be willing to take what we got.

I agree that so far as this northeastern Ohio territory is concerned, we have gotten pretty good treatment.

(1912) It is true that in former years, prior to the general advances, our advantage to Cleveland, for example, from Kanawha and Kenova was only 25 cents and is now increased to 79 cents; but, of course, that was on a different level of rates, so that the 25 cents represented a considerable portion of the total rate that we paid.

I am asked whether from a transportation standpoint there is any real reason why we are entitled to only a 15-cent differential over No. 8 when these interstate districts are taking a 79-cent differential over us for comparable differences in distance. I cannot answer questions from a transportation standpoint. I have discussed only the competitive relationhip between our rates, and I will have to stick to that.

I am now asked whether, if we are entitled to a differential of 15 cents over Ohio No. 8 for a given difference in distance, I know of any reason why other competitive districts a substantially equal distance farther from that market than is our district should not have a comparable [fol. 2021] differential. The only reason I know of in that respect would be that, with differences in rates as they now exist, those districts have always been able to, and we are continuing to be able to, move large quantities of coal into the same markets that we serve. (1913) That answer is predicated upon the fact that this is a competitive situation that we are in and that, based on the rates now in effect, these people have been able to get along for years and show substantial increases in their tonnage production, whereas our district has been declining steadily.

I have said that we have no inclination to deny to the railroads or to advocate anything that would deny to the railroads needed revenues. As I have said, we are primarily interested in the question of relationship rather than of the level of the rates.

By Mr. McVann:

The coal which we ship to Cleveland is largely domestic coal, for household use. Of our mine-run output, that class of coal forms about one-third, I should say. The remainder falls largely into the sizes of egg, washed nut (1914) and nut, pea, and slack. About 35 per cent of our mine-run output would be slack, screenings, etc.

[fol. 2022] By Mr. Bronson:

A strictly truck mine, as distinguished from a railroad-served mine, would be one having no railroad siding and delivering its coal solely to trucks. These truck mines are very small affairs, generally speaking. That is, a single

mine unit is a very small affair. It is usually located on the property of some farmer or freeholder who has made a lease or is digging the coal himself. The equipment is very crude. The screening facilities, if present at all, are very crude. The ordinary truck mine looks merely like a rough lumber chute stuck up on a hillside. I might add that there is an added danger in this truck competition from the fact, as brought out by Mr. Ireland, (1915) that people buy this coal and are inclined to assign to the district the coal comes from a reputation based on this truck coal, which is not at all representative of the coal which we operators are able to produce and ship from that district.

By Mr. Tefft:

I am reminded that in reply to a question from Mr. Younger, I made the statement that we did not care to have an adjustment of one kind—that is, based on mileage—to one section of Ohio and an adjustment of another kind into another section of Ohio; that is, whatever adjustment might be made into northeastern Ohio should be applied equally [fol. 2023] throughout Ohio. My idea in making that statement was this: that an adjustment upon a mileage basis in northeastern Ohio might deprive us of that market, and then, the rates to other territories which we serve not having been adjusted, we would continue on the old basis, and the result would be that we would have lost our northeastern Ohio market and had no other market given to us to take the place of it.

Toledo is a very important consuming point in so far as Hocking coal is concerned.

By Mr. Fitzpatrick:

(1916) What we want is a relationship that will permit us to market our coal. Necessarily, we have first to take care of ourselves. We do not want to hurt the carriers, but we do not want to hurt ourselves either. We do not want to lose any markets.

[fol. 2024] A. I. Derr was called as a witness, and having been duly sworn, testified as follows:

Direct examination.

By Mr. Bronson:

(1917) A. I. Derr, Assistant to President, Pittsburgh & West Virigina Railway Company, Wabash Building, Pittsburgh, Pa. I have been connected with that railroad for the past eight years. I have general supervision of all the departments of the Pittsburgh & West Virginia, including the accounting department, but excepting the operating department.

I have had prepared a statement showing the income account of the Pittsburgh & West Virginia Railway Company from 1928 to October 31, 1932. The figures thereon are taken from the books of the (1918) company and are the same as reported to the Interstate Commerce Commission.

(Exhibit 341, Witness Derr, received in evidence.)

This statement brings the income account up to October 31, 1932. I also have the net income for November, 1932, which is $14,080.62.

That would bring the net income deficit for that portion of the year 1932 ending November 30th, to $415,113.14.

I would say that coal, at the present time, constitutes approximately 60 per cent of the total traffic of the Pittsburgh and West Virginia. In normal times manufactured steel articles, constitutes about 24 per cent.

[fol. 2025] Coal, during normal times, approximates 60 per cent—of the tonnage and revenue both.

[fol. 2026] R. M. Paisley was recalled as a witness, and having been previously sworn, testified as follows:

Direct examination.

By Mr. Bronson:

(1919) I was sworn and qualified a few days ago, when I testified in connection with Docket 25566.

I am a member of the Coal, Coke & Iron Ore Committee of the Central Freight Association, having railroad jurisdiction over westbound coal rates from the Pittsburgh and

Ohio districts. I am familiar with the coal rate structure involved in this proceeding.

(1920) Witness Kern has filed as Exhibit No. 22 a copy of a map showing the coal districts in colors of the Inner Crescent, Outer Crescent and Ohio districts. This map also shows the line of demarcation separating the so-called affected and non-affected territories. It is similar to the map first prepared for use in I. & S. 774 (46 I. C. C. 66) involving westbound rates on coal from the two Crescents and Ohio districts, and later used in the Ohio-Michigan Coal Rate cases, 80 I. C. C. 663. I shall refer to this map in my testimony.

With particular reference to our case, the map shows that the Pittsburgh and Ohio No. 8 districts adjoin, the Ohio River separating the two districts, with the Cambridge district lying southwest of the Ohio No. 8 District.

The Ohio No. 8 and Cambridge Districts located west of the Ohio River, had, prior to August 1, 1932, a common rate to Cleveland, Lorain, and Huron, Ohio, of $1.74 and now [fol. 2027] have a common rate of $1.45 to Cleveland and Lorain and $1.55 to Huron. The Pittsburgh District located east of (1921) the Ohio River, with the exception of mines on the Pennsylvania Railroad in what is known as the Panhandle of West Virginia, located adjacent to the Ohio River, had prior to October 5th a common rate of $1.84 to Cleveland, Lorain and Huron. Since October 5th the Pittsburgh & West Virginia's Pittsburgh District mines have a $1.55 rate to Cleveland and Lorain and a $1.65 rate to Huron, while all other mines in the Pittsburgh District still have a $1.84 rate, with the exception of the Panhandle mines which have a $1.74 rate, the former Ohio No. 8-Cambridge District rate.

I have prepared a statement showing the rates from the Ohio No. 8 and Pittsburgh Districts to Cleveland, Lorain and Huron from June 30, 1917, to July 31, 1932, and also since August 1, 1932, when the Ohio No. 8 rates were reduced by the Wheeling & Lake Erie Railway 29 cents per ton to Cleveland and Lorain and 19 cents per ton to Huron, followed by similar reductions, effective August 12, 1932, by the Pittsburgh & West Virginia Railway Company, from its Ohio No. 8 mines, and September 2, 1932, by the Pennsylvania Railroad, Baltimore & Ohio, and New York Central from their Ohio No. 8 mines, and October 5, 1932,

by the Pittsburgh & West Virginia Railway Company from its Pittsburgh District (1922) mines, all of which reductions were made to meet the Wheeling & Lake Erie Railway's Ohio No. 8 competition.

[fol. 2028] The Cambridge rates were the same as Ohio No. 8 June 30, 1917, to July 31, 1932, and since September 29th last.

I now offer this statement as my Exhibit No. 342.

(Exhibit 342, Witness Paisley, received in evidence.)

This statement was prepared by me personally and is correct. This exhibit shows that in the 15 years ended July 31, 1932, the Pittsburgh and Ohio No. 8 rates to Cleveland, Lorain and Huron were nearly doubled. The same is true of the Cambridge rates. It shows that the Ohio No. 8 reduced rates, and the P. & W. V.'s Pittsburgh District reduced rates, under consideration in I. & S. 3801, are still higher than the rates in effect after the 25 per cent increase made in 1918 by the Director General. The same is true of the Cambridge rates. With the exception of four short interruptions, the Pittsburgh and Ohio No. 8 Cambridge district rates prior to August 1, 1932, have been interrelated for more than 15 years by a fixed 10-cent differential, notwithstanding the fact that calculated on the distances shown in Mr. Kern's Exhibits Nos. 33 and 38 the average haul from all (1923) tariff origins via all tariff routes in the Ohio No. 8 district to Cleveland is but 13.2 miles less than the average haul from all tariff origins via all tariff routes in the Pittsburgh District; while the average haul from all tariff origins via all tariff routes in the [fol. 2029] Cambridge district to Cleveland is 41.8 miles greater than the average haul from all tariff origins via all tariff routes in the Pittsburgh District, and the average haul from all tariff origins via all tariff routes in the Ohio No. 8 and Cambridge Districts combined to Cleveland is but 4.8 miles less than the average haul from all tariff origins via all tariff routes in the Pittsburgh District.

This exhibit shows that effective August 1, 1932, the Ohio No. 8 rates were reduced by the Wheeling & Lake Erie Railway from $1.74 to $1.45 to Cleveland and Lorain, and from $1.74 to $1.55 to Huron, followed by like reductions in their Ohio No. 8 rates by the P. & W. V., August 12, 1932, and by the Pennsylvania, Baltimore & Ohio, and New York

Central, September 2, 1932, and that effective October 5, 1932, the Pittsburgh and West Virginia's Pittsburgh District rates were reduced from $1.84 to $1.55 to Cleveland and Lorain and $1.65 to Huron, thereby reestablishing the 10-cent differential so long in effect. The Cambridge district rates were reduced on September 20, 1932, from $1.74 to $1.45 to Cleveland and Lorain, and $1.55 to Huron, by order of the (1924) Ohio Commission in No. 8072.

In respect to the four short interruptions which temporarily disturbed the 10-cent differential; the interruptions were due to the fact that in the 15 per cent increase case [fol. 2030] in 1917, the Public Utilities Commission of Ohio did not permit the increased intrastate rates to become effective until August 29, 1917, whereas the increased rates on interstate traffic became effective July 1, 1917, and in the 40 per cent increase rate case in 1920, the Ohio Commission did not allow the carriers to increase, effective August 26, 1920, the intrastate rates in such manner as to preserve the 10-cent differential relationship with the increased rates from the Pittsburgh District, and when the carriers subsequently, on December 17, 1920, increased the Ohio intrastate rates to restore the 10-cent differential, the Ohio Commission required such increased rates to be reduced, effective February 4, 1921, so that same would reflect a straight advance of 40 per cent over the intrastate rates effective August 25, 1920. In the 10 per cent reduced rate case in 1922 the carriers again, effective July 1, 1922, restored the 10-cent differential relationship by reducing the Ohio intrastate rates less than 10 per cent; however, the Ohio Commission by order required the carriers to reduce the intrastate rates that were effective June 30, 1922, the full 10-per cent effective September 21, 1922, and the 10 cent (1925) differential was finally restored, effective September 27, 1923, by increasing the intrastate rates in harmony with the report of the Interstate Commerce Commission in the Ohio-Michigan Coal cases, 80 I. C. C. 663, and the [fol. 2031] 10-cent differential has stood since 1923 until August 1st last.

To obtain the restoration of the 10-cent differential, in 1923 the carriers filed a 13th Section petition, which the Commission heard in connection with the Ohio-Michigan Coal Rate cases. There, at page 689, the Commission said that the differential between coal rates from the No. 8 Dis-

trict in eastern Ohio to Cleveland had for some time been 10 cents under the rate from the Pittsburgh District to Cleveland; that the intrastate rates from the Ohio No. 8 District to Cleveland were further reduced, thus increasing the differential to 14 cents and making the intrastate rate 4 cents less than the interstate rate, and the Commission, finding undue preference and prejudice in the rates to both the affected territory and the non-affected territory, issued an order which today stands, having the effect of protecting the 50-cent differential southern Ohio under Pittsburgh to the affected territory, but did not issue an order which would have had the effect of protecting the 10-cent Pittsburgh over Ohio No. 8 differential to Cleveland in the non-affected territory, stating at page 690 that the Ohio Commission would doubtless permit the Ohio carriers to restore the differential (1926) by increasing the rate without the formality of an order in the 13th Section case, No. 12851.

The Ohio Commission did permit the carriers to carry out the findings of the Commission, and effective Septem- [fol. 2032] ber 27, 1923, the 10-cent differential was restored by increasing the Ohio No. 8 Cleveland, Lorain and Huron rates to $1.74, and those rates were in effect until August 1, 1932, when the Wheeling & Lake Erie reduced the Ohio intrastate rates from the Ohio No. 8 District to Cleveland and Lorain, 29 cents per ton, and to Huron, 19 cents per ton, thus widening the Commission's approved differential under Pittsburgh from 10 cents to 39 cents and 29 cents, respectively. Had the Commission issued an order in the 13th Section case in 1923, the 10-cent differential to Cleveland, Lorain and Huron in non-affected territory would have been protected, and the Wheeling & Lake Erie would have been powerless to have reduced the Cleveland, Lorain and Huron rates on August 1, 1932, as it did, and thereby widen the 10-cent differential which brought about the cases here under consideration, due to the effort of the P. & W. V. to preserve the 10-cent differential, approved by the Commission in 1923, and in effect for so many years.

(1927) In respect to the non-discriminatory character of our $1.55 rate from our Pittsburgh District mines to Cleveland and Lorain; I would like to say that the P. & W. V. has but four small mines in the Ohio No. 8 Dis-

trict, which ship but a negligible tonnage of coal to Cleveland, Lorain and Huron. Practically all of its Cleveland, Lorain and Huron tonnage comes from 12 mines in its Pittsburgh District. In this respect its situation differs [fol. 2033] materially from the situations of the Pennsylvania, Baltimore & Ohio, and New York Central, which carriers serve many mines in the Ohio No. 8 District. When the Wheeling & Lake Erie reduced the rates from its mines in the Ohio No. 8 District to Cleveland, Lorain and Huron, it did so without any order from the Public Service Commission of Ohio. In other words, its reductions were purely voluntary.

To meet the Wheeling competition, the P. & W. V. correspondingly reduced its rates via the Wheeling & Lake Erie Railway from its Ohio No. 8 and Pittsburgh District mines.

The Commission has uniformly held from the first that a carrier cannot pick out particular shippers on its line, place them in competition with shippers on a rival line, and deny like treatment to other shippers on its line who suffer the same competition. In this situation, the Pittsburgh District operators are just as much in competition with the Wheeling's Ohio No. 8 operators as are the P. & W. V. (1928), Pennsylvania, B. & O., and New York Central Ohio No. 8 operators, and under the rulings of the Commission, as we understand them, the P. & W. V. could not lawfully place its Ohio No. 8 operators in competition with Wheeling Ohio No. 8 operators without according their differentially related Pittsburgh District operators precisely the same treatment. I refer particularly to:

[fol. 2034] Bunker Hill & Sullivan Mining & Construction Company v. Oregon-Washington Railroad & Navigation Company, 132 I. C. C. 266;

Proportional Rates of Ohio River Crossings, 43 I. C. C. 458;

Mayor and Council of Boston, Georgia, v. Atlantic Coast Line Railroad Company, 24 I. C. C. 50;

Detroit Chemical Works v. Northern Central Railway Company, 13 I. C. C. 357;

North Fork Cannel Coal Company v. Ann Arbor Railroad Company, 25 I. C. C. 241;

and the many other cases referred to in 2 Interstate Commerce Acts, Annotated, 1172.

In view of the rulings of the Commission and the fact that the Wheeling & Lake Erie Railway participates in the rates of the Pittsburgh & West Virginia from its Ohio No. 8 and its Pittsburgh District mines, to avoid unjust discrimination in favor of Ohio and against Pittsburgh District mines the P. & W. V. and W. & L. E. were obligated by law to reduce the Pittsburgh District rates when the Wheeling and Lake (1929) Erie and P. & W. V. reduced their Ohio No. 8 rates. Since the reduced rates have the effect of restoring the long existing and Commission-approved differential between the Pittsburgh and Ohio No. 8 District rates to Cleveland, Lorain and Huron, such reduced rates are necessarily non-discriminatory.

In respect of the reasonableness of our reduced Pittsburgh District rates, after a most careful study, the con-[fol. 2035] clusion is inevitable that, measured by customary standards, our reduced rates, if not reasonable maximum rates, are well above the level of reasonable minimum rates for the hauls from mines on the P. & W. V. in the Pittsburgh District to Cleveland, Lorain and Huron.

To offer as proof that our reduced Cleveland and Lorain rate of $1.55 and Huron rate of $1.65 are above the level of reasonable minimum rates for the hauls from our Pittsburgh District mines to these points, via the Wheeling and Lake Erie, I have prepared a statement showing the distances from our Pittsburgh District mining points to the Cleveland-Lorain and Huron groups via the Wheeling & Lake Erie, over which route the reduced rates alone apply (1930). This statement was prepared by me and is correct. It is captioned "Statement showing distances via P. & W. V. Railway-W. & L. E. Railway Route from mines on the Pitsburgh & West Virginia Railway," etc.

(Exhibit 343, Witness Paisley, received in evidence.)

This exhibit shows, on sheet 3, that the average haul from the 12 P. & W. V. mines in the Pittsburgh District to the Cleveland-Lorain group taking the $1.55 rate is 141.8 miles, and to the Huron group taking the $1.65 rate, 155.4 miles. It also shows that the average haul to Cleveland proper is 159.6 miles; to Lorain proper, 161.6 miles; and to Huron proper, 172.6 miles. Those distances are all via the Wheel-[fol. 2036] ing & Lake Erie.

(1931) We have but twelve mines in our Pittsburgh District, ten of which are now actively engaged in shipping coal, and the other two are fully equipped and ready to ship coal. These mines have all shipped coal in the past. They just do not happen to be shipping coal today.

I have personally prepared another statement showing the short route distances from the 12 P. & W. V. Pittsburgh District mines to Cleveland, Lorain and Huron proper, the longest haul point in the two groups to which the reduced P. & W. V. rates apply.

(Exhibit 344, Witness Paisley, received in evidence.)

This exhibit was prepared by me personally and is correct to the best of my knowledge and belief. It shows that the average distance to Cleveland proper from the 12 P. & W. V. mines in the Pitsburgh District via (1932) the short tariff routes is 144.1 miles, to Lorain proper 154.3 miles, and to Huron proper 172.6 miles. The short tariff routes are in some instances via the Wheeling & Lake Erie and in others via the Pittsburgh & Lake Erie. The distances are from the so-called mining points or stations which represent the mines at which the coal is shipped. The mines are shown in the I. C. C. tariffs, as shown on the exhibit.

The reduced rates shown on the exhibit do not as yet apply via routes other than the Wheeling and Lake Erie, that is the routes shown in the exhibit other than the Wheeling & Lake Erie.

[fol. 2037] Measured by the distances shown in my Exhibit 343, the ton and car mile earnings our reduced Pittsburgh District rates obtain are: To the Cleveland-Lorain group, 10.93 mills per ton mile and 54.7 cents per car mile, based on 50 tons per car; to the Huron group, 10.62 mills per ton mile and 53.1 cents per car mile, based on 50 tons per car. To Cleveland proper, 9.71 mills per ton mile and 48.6 cents per car mile based on 50 tons per car. (1933) To Lorain proper, 9.59 mills per ton mile and 48 cents per car mile based on 50 tons per car. To Huron, Ohio, proper 9.56 mills per ton mile and 47.8 cents per car mile based on 50 tons per car.

In 1931 the average loading per car of our cars was approximately 50 tons.

Mr. Kern's Exhibit No. 38 shows that the average haul via all tariff routes from all tariff origins, except mines on

the Pittsburgh & West Virginia, is 172.7 miles to Cleveland proper against 159.6 miles from our mines, as shown in my Exhibit No. 343.

Mr. Kern's Exhibit No. 38 shows that the average haul via all tariff routes from all tariff origins, except mines on the Pitsburgh & West Virginia Railway, is 198½ miles to Lorain proper against 161.6 miles from our mines, as shown in my Exhibit No. 343.

Mr. Kern's Exhibit No. 38 shows the average haul via all tariff routes from all tariff origins to Huron, Ohio, and, [fol. 2038] by use of same, an average distance from mines, except (1934) those of the Pittsburgh & West Virginia Railway, of 214.1 miles, is obtained to Huron, Ohio, proper, whereas my Exhibit No. 343 shows the average from our mines to be 172.6 miles to Huron, Ohio, proper. That is to say, all P. & W. V. mines in the Pittsburgh District.

The distances shown in my Exhibit 343 are over the routes via which the $1.55 rate applies to Cleveland and Lorain and the $1.65 rate to Huron; it does not show any other distances.

I am asked what standards impelled me to the belief that, measured by customary standards, our reduced rates from P. & W. V. mines in the Pittsburgh District to Cleveland, Lorain & Huron are above the level of reasonable minimum rates. The Pittsburgh District and the Ohio No. 8-Cambridge Districts are located in Central Freight Association territory westbound, and from a transportation standpoint the same (1935) general level of rates should apply from the Pittsburgh District as apply from the Ohio No. 8-Cambridge Districts to Cleveland, Lorain and Huron. As I shall later show our reduced rates are as high, and in some cases higher for like hauls than many of the normal rates voluntarily established by the carriers in this territory presumably as reasonable maximum rates.

The Commission has ruled in numerous cases that the transportation conditions in Central Freight Association [fol. 2039] territory are substantially the same, and the same scales of rates have recently been prescribed in a number of cases for hauls in Central Freight Association — in Pennsylvania, Ohio, Indiana and Illinois. The cases I particularly refer to are as follows:

I. C. C. Docket 15879, Eastern Class Rate Investigation, 164 I. C. C. 314, decided May 13, 1930; page 322;

I. C. C. Docket 17000 Rate Structure Investigation, Part 6, Iron and Steel Articles, 155 I. C. C. 517, decided June 3, 1929, page 520;

I. & S. Docket 3169, Crushed Stone from Hillsville, Pa., and Related Points to Destinations in Ohio, Pennsylvania, and West Virginia, 148 I. C. C. 142, decided November 13, 1928;

I. & S. Docket 2821, General Cancellation of Less-Than-Carload Commodity Rates and Cancellation of Certain Carload Commodity Rates in Illinois Freight Association, Western (1936) Trunk Line, and Central Freight Association Territories, 140 I. C. C. 227, decided March 14, 1928;

I. C. C. Docket 15329, Pennsylvania Sand and Gravel Producers Association et al. v. Baltimore & Ohio Railroad Company et al., 104 I. C. C. 717, decided December 22, 1925, page 728.

I. C. C. Docket No. 12710, Atlas Portland Cement Company v. Chicago, Burlington & Quincy Railroad Company et al., 81 I. C. C. 1, decided June 6, 1923.

[fol. 2040] I might say (1936), as to this Docket No. 12710, that it covers a scale of rates prescribed within Illinois, which was later adopted for application throughout Central Freight Association territory.

The Ohio Commission in reducing the Canton, Massillon rates in No. 7252 decided June 30, 1932, referred to the scale of maximum rates prescribed by the Interstate Commerce Commission in Coal Trade Association of Indiana v. B. & O. R. R. et al., 185 I. C. C. 225, decided May 31st last, and Intrastate Rates on Bituminous Coal between Points in Illinois, 182 I. C. C. 537, decided March 8, 1932. The reduced rates of the Wheeling to Cleveland, Lorain and Huron and other northern Ohio points, effective August 1st, are on those scales, and in its application to the Ohio Commission to establish those (1937) rates on short notice, the Wheeling stated that their proposed rates were on substantially the same basis as the Canton and Massillon rates prescribed by the Ohio Commission in Docket No. 7252.

The average haul via W. & L. E. from our mines in Cleveland is 159.6 miles; to Lorain, 161.6 miles, and to Huron, 172.6 miles. The scale prescribed in Docket 23922 provides for a rate of $1.55 for hauls of 159.6 miles to Cleveland, $1.65 for hauls of 161.6 miles to Lorain, and $1.65 for hauls

of 172.6 miles to Huron. Our reduced rates line up with the scale, with the exception of our Lorain rate of $1.55, which, under the scale would be $1.65.

[fol. 2041] We publish a rate of $1.55 to Lorain, when the scale provided for a rate of $1.65, because Lorain has always been grouped with Cleveland taking the same rate regardless of length of haul, there being highly competitive iron and steel industries located at both points, making a common rate on coal absolutely necessary. The scale in 23922 broke at 140 and 160 miles, and it so happened that the distance from the Wheeling's (1938) Ohio No. 8 mines to Lorain was just under 140 miles; whereas the distance from our Pittsburgh District mines was just over 160 miles; while the distance from our Pittsburgh District group to the Cleveland-Lorain group was but 141.8 miles, which would produce under the scale a rate of $1.55. Finally, it was necessary to make our rate the same to Lorain *the same* as to Cleveland to preserve the long-standing 10-cent differential.

In support of my statement that our reduced rates from our Pittsburgh District mines of $1.55 to Cleveland and Lorain and $1.65 to Huron are above the level of reasonable minimum rates, I have personally prepared a statement showing rates voluntarily published by the Pennsylvania, B. & O., and New York Central and other carriers for hauls comparable to our Cleveland, Lorain and Huron hauls.

[fol. 2042] (Exhibit 345, Witness Paisley, received in evidence.)

This exhibit was prepared by me personally, and is correct to the best of my knowledge and belief. It shows many instances where the carriers named voluntarily publish, presumably as maximum reasonable rates, rates on coal in this territory which are low, or lower, distance considered, and (1939) measured by the 23922 scale, as are our P. & W. V. reduced rates.

Thus, for example, the trunk line railroads publish a rate of $1.42 for an average haul of 148 miles from the Connellsville District to Youngstown.

The Trunk Line railroads publish a rate of $1.58 from the Fairmont District for an average haul of 192 miles to

Youngstown, and the same rate applies from the P. & L. E. short-haul mines for an average haul of 168 miles.

The carriers publish from the Cambridge District to Akron, Ohio, a rate of $1.51 for an average haul of 162 miles; and to Columbus, Ohio, a rate of $1.26 for an average haul of 109 miles.

The Ohio No. 8 carriers publish a rate of $1.39 to Columbus, Ohio, for an average haul of 145 miles.

The carriers publish as the key rate of the entire westbound coal rate structure to affected territory a rate of $1.89 for an average haul of 220 miles.

[fol. 2043] The maximum rate prescribed by the Commission on lake coal to Cleveland, Lorain and Huron, the very points involved in this proceeding, is $1.46—9 cents lower than our reduced rates for an average haul approximately 20 miles longer than our haul to Cleveland, and during the past summer published a rate applicable on Canadian coal to Cleveland, Lorain and Huron of $1.28.

(1940) It is to be noted that adding the Trunk Lines' reciprocal switching charge of 20 cents a ton at Cleveland (Witness Kern's Exhibit 76) to the $1.28 rate the total, or $1.48, is less than our reduced rate of $1.55.

There is one thing certain that if the $1.28 lake rate to Cleveland, Lorain and Huron, which must be assumed to be at least not less than a reasonable minimum rate, for the Commission permitted it to be published as a lawful rate, then our reduced Cleveland rate is substantially higher than a reasonable minimum rate.

Another rate which is highly suggestive that, from the standpoint of pure reasonableness, our reduced rates are well above the level of reasonable rates, is the rate which the Commission itself established as a maximum reasonable rate on ex-river coal from Mingo Junction to Cleveland and Lorain of $1.27.

[fol. 2044] There are numerous other instances shown in this exhibit where the normal rates voluntarily established by the Trunk Lines in this territory are as low or lower than our reduced rates from the Pittsburgh District to Cleveland, Lorain and Huron.

(1941) The Cambridge District has always taken the same rate as the Ohio No. 8 District to Cleveland and other northern Ohio points. Witnesses for the carriers testified that both districts should take the same rate, and witnesses for

the carriers also testified that transportation conditions in the Pittsburgh and Ohio No. 8 Districts were substantially the same, but somewhat more difficult in the Cambridge District. For these reasons, I submit that in measuring Pittsburgh District rates, the average distance from both the Ohio No. 8 and Cambridge Districts should be used.

Kern's Exhibit No. 38 shows that the average haul from the Pittsburgh District to Cleveland is 172.6 miles. Kern's Exhibit No. 33 shows that the average distance to Cleveland from the Cambridge and Ohio No. 8 Districts combined is 167.8 miles. From this it will be seen that from a distance standpoint the Pittsburgh District and the Ohio No. 8—Cambridge Districts should take the same rates.

[fol. 2045] I call particular attention to the fact that the 23922 scale produces a rate of $1.65 to Cleveland for both the Pittsburgh District 172.6 mile haul (Kern's Exhibit No. 38) and the Ohio No. 8—Cambridge District 167.8 mile haul (Kern's Exhibit No. 33).

(1942) Using Cleveland as illustrative, the average distances shown in Kern's Exhibit No. 38 from Pittsburgh & West Virginia mines in the Pittsburgh District via the route the $1.55 rate applies is 159.6 miles. Computed from Mr. Kern's Exhibit No. 33, the average distance from the Wheeling & Lake Erie's mines in the No. 8 District is 158.3 miles via the routes the $1.45 rate applies. From this it would seem that the Pittsburgh & West Virginia $1.55 rate to Cleveland is higher, distance considered, than are either the Wheeling's $1.45 rate from its mines or the rates of all the carriers from all mines in the No. 8 District taking the $1.45 rate for an average haul of 156.7 miles (Kern's Exhibit No. 33). Giving consideration to the fact that transportation conditions are substantially the same, from the standpoint of relative reasonableness, Kern's Exhibits Nos. 33 and 38 show that the rates from Pittsburgh & West Virginia Pittsburgh mines, instead of being 10 cents higher, should be the same as the Ohio No. 8 rates.

[fol. 2046] The 23922 scale would make these Cleveland rates for the distances in Kern's Exhibits 33 and 38 from our Pittsburgh District mines and also from all Ohio No. 8 mines $1.55.

(1943) The distance from the Pittsburgh & West Virginia Pittsburgh District mines taking the $1.55 rate to Cleveland, as illustrative, is 159.6 miles. Kern's Exhibit

No. 33 shows that the average distance from the B. & O. and Pennsylvania mines in the Cambridge District to Cleveland taking the $1.45 rate is 210.3 miles. From this it would seem that our Pittsburgh District reduced rates are relatively higher than the Cambridge District reduced rates.

The 23922 scale, using the distances shown in Kern's Exhibits No. 33 and 38, would make the Cleveland rates $1.55 from our Pittsburgh District mines and $1.85 from the Cambridge District mines.

The distance from the Ohio No. 8—Cambridge District mines combined taking the $1.45 rate, using the distances shown in Kern's Exhibits 33 and 38, is 168.1 miles. On those distances the 23922 scale would make the Cleveland rate $1.65.

[fol. 2047] (1944) On the basis of Kern's exhibits, from the standpoint of relative reasonableness, our $1.55 Cleveland rate is a higher rate than the $1.45 rate applicable from the Ohio No. 8—Cambridge districts combined.

Using the 23922 scale, computing the distance on Kern's Exhibit No. 33, the Hocking District would take a rate to Cleveland of $2.02 against a reduced rate of $1.60 and a normal rate of $1.89. From a standpoint of relative reasonableness, our $1.55 Pittsburgh District reduced rate is substantially lower than either the Hocking reduced or the Hocking normal rate.

Computed from Kern's Exhibits 33 and 38, the following tabulation shows how the average distances via the short tariff routes to Cleveland from all origins on each railroad in the Pittsburgh, Ohio No. 8, Cambridge and Ohio No. 8—Cambridge districts combined, compare; and what the rates would be by use of the 23922 scale for those average short tariff route distances:

Pittsburgh District, average distance, 166.9 miles; rate $1.65.

Ohio No. 8 District, average distance, 135.3 miles; rate $1.45.

Cambridge District, average distance, 195.3 miles; rate $1.75.

(1945) Ohio No. 8—Cambridge Districts combined, average distance, 147.4 miles, rate $1.55.

[fol. 2048] The distances (1945) shown in Mr. Kern's Exhibits 33 and 38 are not the short tariff distances from all

mining points in each district as defined in Docket No. 23922, for two reasons: First, they show distances from all tariff origins and not from all mining points; second, because the tariff origins on such roads as the P. & W. V. and Montour Railroad are treated as tariff origins of the B. & O., P. R. R. and P. & L. E.

If there are any exhibits on file in this case, that show the short tariff route distances from mining points in the Pittsburgh, Ohio No. 8 and Cambridge districts to Cleveland, under the formula in Docket 23922, I have not been able to discover them.

(1946) I have prepared a statement showing rates recently prescribed for hauls via Central Freight Association territory on coal, comparable with the haul from P. & W. V. Pittsburgh District mines to Cleveland. It shows rates recently prescribed or approved by the Interstate Commerce Commission in Illinois and Indiana, as compared to our reduced rates.

(Exhibit 346, Witness Paisley, received in evidence.)

This exhibit shows that there are many maximum rates in Central Freight Association territory prescribed by the Commission which are relatively lower than our reduced Cleveland rates, length of haul considered.

[fol. 2049] I would like to call attention to the rates from the southern West Virginia and eastern Kentucky and Tennessee Districts to Cleveland. (1947) Take the Kanawha District, for example. The voluntary rate published by the C. & O., B. & O. and New York Central from the Kanawha District to Cleveland is $2.39, and the average haul is 431.5 miles. (Kern's Exhibit No. 43). The Kanawha rate to Cleveland is not related by a fixed differential to the rate from any other district to Cleveland, it being the Toledo, Ohio, rate carried back, and it must be assumed to be at least a minimum reasonable rate.

The same comparison can be made with even greater force between the P. & W. V. $1.55 rate and the $2.39 rate from the Thacker, Big Sandy, Hazard, McRoberts and Harlan districts to Cleveland, where the average hauls are 419 to 548 miles. (Mr. Boden's Exhibit No. 106.)

There are only two districts which have Cleveland rates interrelated to the Pittsburgh District by fixed differentials approved by the Interstate Commerce Commission, namely,

the Ohio No. 8 District, with a 10-cent differential under Pittsburgh, approved by the Commission in the Ohio-Michigan Coal cases, and the Connellsville District, with a 6-cent differential over Pittsburgh, approved by the Commission in I. & S. 774 (46 I. C. C. 66).

While the Fairmont District rates are generally 15 cents higher than the Pittsburgh District rates, I cannot find that the 15-cent differential has ever been approved by the Com- [fol. 2050] mission. In the Lake Cargo Coal Case of 1925, 126 I. C. C. 308, (1948) the Commission fixed the Fairmont differential on lake cargo coal at 25 cents over Pittsburgh. This differential now stands at 20 cents; it being my understanding that when the compromise was shortly thereafter made, and the southern West Virginia differential reduced from 45 cents to 35 cents, the Fairmont rates were made 20 cents over Pittsburgh. The Pittsburgh differential over Ohio No. 8 is 10 cents for a difference in average haul of 13.2 miles, shown by Mr. Kern's Exhibits Nos. 33 and 38. The Connellsville differential over Pittsburgh is 6 cents, for a difference in average haul of 46.5 miles, according to Mr. Kern's Exhibit No. 38, and the Fairmont differential over Pittsburgh is 15 cents, for a difference in average haul of 94.1 miles, according to the same exhibit. This would indicate that from a differential standpoint the normal Pittsburgh rates are relatively higher than the Connellsville and Fairmont rates to Cleveland. I am referring to the Cleveland territory, and not to other territories—Cleveland, Lorain, and Huron territories.

From its twelve Pittsburgh District mines, the Pittsburgh & West Virginia Railway handled the following coal tonnage to Cleveland, Lorain and Huron proper:

[fol. 2051]

(1949)	1928	305,175 tons of 2,000 pounds
	1929	374,137 tons
	1930	261,540 tons
	1931	194,898 tons
	7 Mos. Jan. to Jul., inclusive, 1932	95,589 tons
	Aug. 1 to Oct. 4, 1932	4,014 tons
	Oct. 5 to Dec. 31, 1932	63,469 tons

The freight revenue received by the Pittsburgh & West Virginia Railway from Pittsburgh District coal to Cleveland, Lorain and Huron proper is as follows:

Year 1928	$178,024
1929	214,256
1930	141,109
1931	123,823
7 Mos. Jan. to July, inclusive, 1932	63,725
Aug. 1 to Oct. 4, 1932	2,040
Oct. 5 to Dec. 31, 1932	44,919

(1950) The period from August 1 to October 4, when our railway only carried 4,014 tons of coal, and earned $2,040, is the period when we had a differential of 29 cents to Cleveland and Lorain and 19 cents to Huron against us.

During August we handled to Cleveland 1,141 tons; to Lorain, 144 tons, and to Huron, nothing; a total of but [fol. 2052] 1,285 tons. During September we handled to Cleveland 1,340 (1951) tons; to Lorain, 283 tons; and to Huron, 970 tons; a total of but 2,593 tons. During the first four days of October we handled to Cleveland only 136 tons, and none to Lorain and Huron. From October 5 to October 31 we handled to Cleveland 12,283 tons; to Lorain, 606 tons, and none to Huron, Ohio; a total of 12,889 tons. In November we handled 20,547 to Cleveland; 373 to Lorain, and none to Huron; a total of 20,919 tons. In December we handled 29,177 tons to Cleveland, 484 to Lorain, and none to Huron; a total of 29,661 tons.

The figures I give are for the year 1932.

(1952) In December, 1932, the Pittsburgh Terminal Coal Company shipped from their four Pittsburgh district mines 13,945 tons to Cleveland, Lorain and Huron. In that same month the Clyde E. Spear Coal Company, Crown Coal & Coke Company and Continental Coal Company, operating five mines in the Pittsburgh district, shipped an aggregate of 15,716 tons of coal to Cleveland, Lorain and Huron. My information is that these coal companies are independent coal companies.

(1953) As is shown by our income statement, filed as Exhibit No. 341, Witness Derr, the Pittsburgh & West Virginia's freight revenue and income during the depression, particularly last year, have fallen to a point where the loss

of the revenue earned on Cleveland, Lorain and Huron coal tonnage would be a most serious blow, which loss in the circumstances of our situation we should not be asked to suffer, [fol. 2053] and which the Commission saves us from suffering by vacating the suspension order in I. & S. 3801 and suspending our advanced rates in I. & S. No. 3833. (1953) I have taken from Form D of the Ohio Bureau of Coal Statistics, the tonnages from all of the Ohio origin districts on all roads to Cleveland, Ohio for the months of October, 1931, and 1932. The total for October, 1931, is (1954) 106,639, and the total for October, 1932, is 155,605.

The September, 1932, total tonnage from these origin districts was 92,050 tons. For September, 1931, the total was 80,194 tons. That is to Cleveland, Ohio from all Ohio origin districts shown on Form D of the Ohio Bureau of Coal Statistics' report. That would take in all mines on all roads that are shown on that report, which include the B. & O., Erie, C. & O., New York Central, Pennsylvania, P. & W. V., and Wheeling & Lake Erie. It covers the Cleveland group. As to corresponding figures for the Pittsburgh District, (1955) form R of the Ohio Bureau of Coal Statistics shows that from the origin districts that have the $1.85 rate, and that necessarily excludes the Pittsburgh & West Virginia to the Cleveland, Ohio, group, the total for September, 1931, is 74,503 tons; for September, 1932, 55,586 tons. The total from these same districts to the Cleveland group for October, 1931, is 98,289 tons, and for October, 1932, 56,856 tons. That last figure also excludes the P. & W. V. on account of it having the $1.55-rate.

[fol. 2054] (1956) The following are the Ohio No. 8 figures for September, 1931, and 1932, and October, 1931, and 1932: B. & O., from the Wheeling Creek No. 8, September, 1931, 11,099 tons; in September, 1932, 7,755 tons. In October, 1931, they had 12,615 tons; in October, 1932, 10,158 tons.

The New York Central from their No. 8 District in September, 1931, had 7,026 tons; in September, 1932, 10,263 tons.

From the New York Central No. 8 District in October, 1931, there were 8,149 tons; October, 1932, 12,148 tons.

The Pennsylvania Railroad from their C. & P. No. 8 in September, 1931, had 13,767 tons; September, 1932,

16,464 tons; October, 1931, 11,019 tons; October, 1932, 35,942 tons.

P. & W. Va., September, 1931, 1,816 tons; September, 1932, nothing; October, 1931, 2,722 tons; October, 1932, 408 tons.

Wheeling & Lake Erie, September, 1931, 15,775 tons; September, 1932, 31,102 tons; October, 1931, 22,961 tons; October, 1932, 45,047 tons.

The B. & O. from St. Clairsville, No. 8, in September of 1931, had nothing; September, 1932, 174 tons; October, 1931, 738 tons; October, 1932, 2,196 tons.

Referring to Mr. Kern's testimony, and particularly his Exhibit No. 66, showing that if the $1.45 rate from the Ohio No. 8 were finally approved by the Commission, and $1.55 put in from the Pittsburgh District, that losses in revenue [fol. 2055] would follow from some $9,000,000 to $44,000,000, I have this to say: The next to the largest individual item in the 1929 tonnages is the lake coal, and the largest individual item in the 1931 tonnage (1957) is the lake coal. There has never been any relation between the local rates to Cleveland, as an example, and the lake rates. That is, during the period that I have had knowledge of those rates, which goes back to about 1911 or 1912, the difference between the two rates has not been constant. There is a period in that time that the lake rate from Pittsburgh was but 12 cents less than the local rate. At that time the lake rate was 88 cents and the local rate was $1.

I really do not see why there would be any necessity of reducing the lake rate 29 cents a ton merely because the local rate to Cleveland is reduced.

I do not believe that, even if the Cleveland local rate be made $1.45 from the northern Ohio districts, and $1.55 from Pittsburgh, there is any necessity whatever of reducing the $1.43 lake rate and the $1.46 lake rate from those two districts at all.

My next item is the coal that is shown in this statement—it is broken up into Ohio, Michigan, and Indiana—going to points (1958) in the so-called affected territory. It is my opinion that there would be no necessity for any reduction to that territory because the key rate to that whole adjustment, measured by this 23922 scale, is but 4 cents [fol. 2056] less than the normal rate. That is, on the average distance of 220 miles that I have shown, the 23922

scale would make $1.85 from the base district, the Ohio Districts, and the local rate or the normal rate today is $1.89. That key rate in the rate adjustment to the affected territory is the rate upon which all other rates in that territory are supposed to relate.

Mr. Kern's crescent district tonnages in his exhibit 66 will, of course, cover the southern low volatile, as well as the high volatile. I took from Form R of the Ohio Bureau of Coal Statistics, the tonnages from the low volatile fields, that is, the C. & O. New River, the N. & W. Tug River, Pocahontas, and Clinch Valley, and the Virginian Railway, which is termed in the Ohio Bureau of Coal Statistics' report as the Virginian District, for the months of September, 1931, September, 1932, October, 1931, and October, 1932, and the tonnages of those districts are as follows:

(1959) September, 1931, 98,904 tons; September, 1932, 87,689 tons; October, 1931, 119,026 tons; October, 1932, 132,488 tons.

I should say that these are the tonnages to the Cleveland Group, as shown in the report of the Ohio Bureau of Coal Statistics, Form R.

Those tonnages indicate that the southern low volatile fields got the normal increase, October over September, [fol. 2057] in 1932, notwithstanding the fact that the rates have been reduced from the Ohio and P. & W. V. Pittsburgh District. So that it would seem to me that it would be very, very foolish to consider reducing the rates 29 cents per ton on that coal tonnage.

(1960) It will be noted by these figures that, comparing October, 1932, with October, 1931, in round figures, the tonnage has increased 13,000 tons, October, 1932, over October, 1931.

Going back to my tonnage figures for the Pittsburgh District, it is my understanding, and it has been verified in practically all the testimony that I have heard so far in this case, that the steam coal in the Pittsburgh group lies largely in the territory that you might say is approximately west of Pittsburgh. The coal in that territory is practically no good for anything else but steam and domestic. Some of the coal mined in points east of the Pittsburgh District is good for special purposes (1961) as well as for steam and domestic purposes.

Witness Kern has grouped Freeport, Pittsburgh and Moundsville Districts so that I will give the tonnages for those districts including the Pittsburgh District. The B. & O. Pittsburgh-Youghiogheny District in October, 1931, had 1,256 tons to the Cleveland group, as shown in Form R report of the Ohio Bureau of Coal Statistics. In October, [fol. 2058] 1932, they had 330 tons.

The Moundsville District had, in October, 1931, 11,040 tons; October, 1932, 686 tons.

Freeport, in October, 1931, had 13,684 tons; October, 1932, 44 tons.

Montour Railroad, in October, 1931, from the Pittsburgh group, had 26,355 tons; in October, 1932, they had 16,639 tons.

It is my understand that there is about 3,000 tons a week of captive coal that comes off the Montour Railroad in (1962) the Pittsburgh District that goes to Cleveland and Lorain.

From the Pennsylvania Railroad, Pittsburgh District, west of Pittsburgh, October, 1931, they had 23,155 tons; October, 1932, nothing.

P. R. R., Pittsburgh District, east of Pittsburgh, October, 1931, 19,679 tons; October, 1932, 38,917 tons.

P. & L. E., Pittsburgh District, October, 1931, 1,823 tons; October, 1932, 240 tons.

P. C. & Y., Pittsburgh District, October, 1931, 1,297 tons; *October, 1932, nothing.*

With the exception of the Pittsburgh & West Virginia Railway, those figures indicate that if the Pittsburgh District in October, 1932, has not lost all its steam and domestic tonnage, it has come pretty near losing it all.

[fol. 2059] Following the action of the Commission in I. & S. 3801 permitting the Pittsburgh & West Virginia Railway to reduce its rate sufficiently to preserve the 10-cent differential over Ohio No. 8, (1963) the publication of which was protested, among others, by the Wheeling & Lake Erie Railway Company, that company and its subsidiary, the Lorain & West Virginia Railway Company, filed with the Commission modified concurrences, Forms FX-4, which restricted the right of the Pittsburgh & West Virginia Railway to publish rates to Cleveland, Lorain and Huron, Ohio, lower than $1.84, the former rate.

The restricted concurrences were effective December 27, 1932, and upon the protest of the Pittsburgh & West Virginia Railway Company against being forced to republish its former rates, the Commission suspended the advanced rate tariff and instituted I. & S. No. 3833.

The Pittsburgh & West Virginia Railway Company justifies the suspension of this tariff on the grounds that so long as the Ohio No. 8 reduced rates continue in effect to handle any appreciable amount of northern Ohio coal, as our August and September records conclusively show, the rate from Pittsburgh & West Virginia Railway mines in the Pittsburgh district cannot exceed Ohio No. 8 rate by more than 10 cents, and since the Pittsburgh & West Virginia Railway Company is forced to apply the reduced [fol. 2060] Ohio No. 8 rate of the Wheeling & Lake Erie from its Ohio No. 8 mines to meet the Wheeling's competition, and since the Wheeling & Lake Erie Railway, which voluntarily published the Ohio No. 8 reduced rates, participates with the Pittsburgh & West Virginia Railway Company in the transportation of Pittsburgh domestic (1964) coal, under the rulings of the Commission in innumerable cases, to avoid unjust discrimination, the Pittsburgh & West Virginia Railway and its connections, the Wheeling & Lake Erie and Lorain & West Virginia Railway Companies, most publish rates from Pittsburgh & West Virginia Pittsburgh district mines not greater than 10 cents higher than the rates published from their Ohio No. 8 mines.

Since unjust discrimination in violation of Section 3 would have been created by the $1.84 rate published in the suspended tariff, suspension of that rate was justified, and indeed required, by the provisions of Section 3 of the Interstate Commerce Act prohibiting undue preference and prejudice.

Moreover, as I have previously shown, using Cleveland for illustrative purposes, a $1.84 rate from our Pittsburgh District mines would be relatively unreasonable in violation of Section 1, as compared to a $1.45 rate from our Ohio No. 8 mines, which is further justification for suspending the $1.84 rate involved in I. & S. No. 3833.

[fol. 2061] My testimony given in I. & S. No. 3801 and Exhibits 341 to 346, apply to I. & S. 3833, so far as they are applicable.

[fol. 2062] Cross-examination.

By Mr. Younger:

(1965) The reduced rates of $1.55 and $1.65, which we made effective on October 5, 1922, from Pittsburgh & West Virginia mines, were confined to the route of the Pittsburgh & West Virginia and the Wheeling & Lake Erie, and not by any other road which formerly had equal rates. (1966) If those rates continue in effect, we cannot extend them to other routes because the carriers, parties to the other routes, do not want us to extend the $1.55. Furthermore, with the exception of our rates in connection with the Bessemer & Lake Erie—perhaps I should be specific and say our rates for the P. & L. E., B. & O., and Pennsylvania Railroad are published in tariff publications of those companies and I could not reduce the rates if I wanted.

(1967) In my judgment, it would be proper to maintain rates 29 cents higher via the route of the Pittsburgh & West Virginia in connection with the P. & L. E., as compared with the $1.55 rate via the route of the Wheeling & Lake Erie, even though the former is the shorter route, so long as the Pittsburgh & Lake Erie does not want to equalize the rate.

I have not claimed that our rate via the Pittsburgh & Lake Erie is a maximum reasonable rate. I have said that it is higher than a minimum reasonable rate. (1968) I would not want to say that that rate is a maximum reason-
[fol. 2063] able rate, because my judgment on that would largely depend on what the reasonable maximum rates were from competing districts.

The attitude of the Pittsburgh & Lake Erie has not hurt the Pittsburgh & West Virginia, so I cannot see why I should object to the fact that they do not want to compete with the Wheeling and Lake Erie Route.

Even if this rate continues in effect via the Wheeling & Lake Erie route, I cannot extend it to these other routes, as I have explained before. (1969) If you are trying to get me to admit that our rate on a reasonable basis should be the same over all routes, I will admit that.

I am asked whether I advocate that the mines on our railroad in the Pittsburgh District are entitled to a lower basis of rates to Cleveland, Huron and Lorain than the

mines on other railroads in the Pittsburgh District that customarily take the same basis of rates. That depends entirely upon what rate you apply from the entire Pittsburgh group, and I think my answer has been demonstrated by my answer in this case. (1970) As I said in my direct testimony, we are in a little different situation than the other railroads. The B. & O. serves the Ohio Districts and the Pittsburgh District, and so does the Pennsylvania and the New York Central. Now, it is the position of the Pittsburgh & West Virginia that we are not going to stand aside and see (1971) an advantage for Ohio which holds Pittsburgh up and follow along with it. We are going to [fol. 2064] take care of the interests of our Pittsburgh District, because it is the district in which our tonnage to Cleveland, Lorain and Huron originates. I hope we have taken care of our district by publishing our $1.55-rate. Just so long as the Ohio rate remains at $1.45 I hope that we are permitted by the Commission to continue our rate of $1.55 to Cleveland.

I have not made one claim that our Pittsburgh District mines should have an advantage over other Pittsburgh District mines that customarily take the same rate. In other words, the 10 cent relationship was approved by the Commission, Pittsburgh over Ohio, and it is my position that as long as I can I shall retain that relationship. (1972) If the other Pittsburgh roads feel that that is not the proper thing to do, I cannot answer why they do not think so. That is their business. We have no objection to the other roads reducing their rates to our figure.

In my testimony all the way through I have said that the reason we made our reductions from the Pittsburgh District was because reductions have been made from Ohio mines to these destinations—originated by the Wheeling & Lake Erie, and subsequently followed by other railroads serving the Ohio mines.

(1973) We did not have in contemplation any reduction in our Pittsburgh District rates until we found that the Wheeling & Lake Erie was going to reduce its Ohio No. 8, Middle, and Massillon District rates into Cleveland and [fol. 2065] this other destination territory involved. If those reductions had not been made from Ohio, I could not have asked for anything else than to continue with our old

rate, because that situation would provide for the continuance of the 10-cent differential relationship.

As to whether it would have continued, in my judgment, a satisfactory and reasonable relationship, and a reasonable level of rates, I do not care to answer, except as the question applies to the 10-cent differential relationship. I would not want to pass judgment on the question with respect to the $1.84 rate. (1974) I have never made any study to determine whether I believed the $1.84-rate a reasonable one.

I stated, and it is my understanding, that the Kanawha District rates are not related to any other producing district to Cleveland—notwithstanding the fact that the southern witnesses have testified that there is a relationship. I think it is nothing more or less than the Toledo rate pushed over to Cleveland. For instance, the $2.39-rate from the southern (1975) districts applies to Mansfield, Ohio, as an illustration, and the rate from the Hocking District to Mansfield is not $1.89, it is less than that. Now, with an origin group relation, it is normal to have the same destination group relations; you do not have it here. As far as our $1.55-rate is concerned, we do have that as to Pittsburgh as related to Ohio No. 8 to Cleveland. The Cleve- [fol. 2066] land group from No. 8 is not different from the Pittsburgh District, over the route that my $1.55 rate applies, except to the extent that we had to clear the intermediate territory, such as Canton, Ohio.

Redirect examination of Witness Paisley.

By Mr. Bronson:

If the Toledo rate should be increased from the crescent districts, it would necessarily cause an increase in the Cleveland rate, as applied via the Toledo rate. It is not necessary to increase the Cleveland rate if the Toledo rate is increased (1976) unless you want to apply the increased rate through the Toledo group. There are ways to keep from doing that. The Ohio Commission told you how to do it from Hocking.

It is our position that if the Commission, as a result of these proceedings, should determine that the $1.45-rate from Ohio No. 8 and Cambridge Districts are maximum reasonable rates, then not to exceed $1.55 from the Pitts-

burgh District would be a maximum reasonable rate. In other words, whatever the maximum reasonable rate from the Ohio No. 8 District, because of similar transportation conditions and practically the same haul and a little difference in coal, in no event would the maximum reasonable rate from the Pittsburgh District exceed the maximum reasonable rate by more than 10 cents.

[fol. 2067] Recross-examination.

By Mr. Ballard:

(1977) The September, 1932, figure from the $1.84 origins to Cleveland of 55,486 tons does not include the Pittsburgh & West Virginia mines in the Pittsburgh District. I excluded them, because if I had included September and excluded October it would not have been a fair comparison.

(At this point Mr. Keeler stated that Mr. Gutheim had asked that there be prepared an exhibit showing the tractive effort figures which were put into the record through Witness Petersen. He stated that, since Mr. Petersen testified, they had checked the figures which were used and found that they are all set forth in Table 4, page 60, of the Commission's decision in the Lake Cargo Cases, 1930, 181 I. C. C. 37, except the figure of 15.08 which showed the average pounds of tractive effort required to haul one gross ton one mile from the Pittsburgh & Lake Erie assembly points in the Pittsburgh and Connellsville Districts. That figure of 15.08 was not a figure that was broken down from any of the Pittsburgh & Lake Erie figures, but is the total figure as shown in Witness O'Toole's exhibit No. 291 in this same proceeding. Mr. Keeler asked that, under [fol. 2068] those circumstances, he be relieved from the necessity of assembling the figures in the exhibit and filing them, to which Mr. Gutheim agreed.)

[fol. 2069] O. C. Larsen was called as a witness, and having been duly sworn, testified as follows:

Direct examination.

By Mr. Bronson:

(1978) O. C. Larsen, Secretary & Treasurer, The North American Coal Corporation, Cleveland, Ohio. Our corpo-

ration acts as exclusive sales agent for the Pittsburgh Terminal Coal Corporation, which has four mines located on what is known as the West Side Belt Division of the Pittsburgh & West Virginia Railway Company, located east of Pittsburgh, and produces what is known as thin vein Youghiogheny Gas Coal.

For many years prior to August 1, 1932, the North American Coal Corporation had a very substantial market in Cleveland, Lorain and Huron for slack and domestic coal produced at mines of the Pittsburgh Terminal Coal Corporation located on the Pittsburgh & West Virginia Railway in the Pittsburgh District east of Pittsburgh. Beginning with August 1, 1932, however, its market for slack coal practically disappeared and it retained a very small market for domestic coal. Since October 5, 1932, however, it has regained its former market in Cleveland, Lorain and Huron and now has a very substantial market, particularly at Cleveland, for steam and domestic coal.

(1980) The reason for that is that prior to August 1, 1932, our coal sold in the northern Ohio market at a freight rate 10 cents higher than Ohio No. 8 and Cambridge coal. Beginning August 1, 1932, the Wheeling & Lake Erie [fol. 2070] Railway Company reduced its Ohio No. 8 rate 29 cents per ton to Cleveland and Lorain and 19 cents per ton to Huron and we found it impossible to sell our coals in Cleveland and Lorain at a 39-cent differential and in Huron at a 29-cent differential.

Effective October 5, 1932, the Pittsburgh & West Virginia Railway Company, by permission of the Interstate Commerce Commission, re-established the former 10-cent differential by reducing its Pittsburgh rates and this enabled us to again sell our coal in the northern Ohio market in competition with Ohio coal.

Our Pittsburgh District coal, all of which is produced at mines east of Pittsburgh, is somewhat lower in ash, sulphur and volatile matter and of higher B. t. u. content and fusion temperature than Ohio coal, and this slight advantage is sufficient in some cases to offset our 10-cent rate disadvantage. In other cases, we are compelled to absorb the 10-cent differential.

(1981) To absorb more than 10 cents per ton would force us to practically give away our slack coal at the mines in order to compete with Ohio coal and would so greatly

reduce our mine price of domestic coal as to cause a serious loss. For these reasons, at a differential greater than 10 cents, we must discontinue selling our slack coal and seriously curtail the sale of our domestic coal in the northern Ohio market.

[fol. 2071] Our experience in August and September is proof of this. To compete freely with Ohio No. 8 and Cambridge coal we really ought to have the same rate.

Eighty per cent of our coal shipped to Cleveland, Lorain and Huron is slack coal. In the preparation of our coal, 30 per cent is slack and 70 per cent prepared sizes.

I stated that during the period from August 1 to October 4, 1932, when we suffered a 39-cent differential to Cleveland, we found it impossible to sell our coals in the northern Ohio market. In June, 1932, we shipped from our four mines in the Pittsburgh District 11,326 tons of coal to Cleveland; in July, 7,286 tons to Cleveland; (1982) in August, we shipped but 1,141 tons; and in September, but 1,234 tons; from October 1st to 4th, inclusive, we shipped but 136 tons, but from October 5th to 31st, after the Pittsburgh & West Virginia Railway Company restored the 10-cent differential, we shipped 10,908 tons; in November, we shipped 15,239 tons; and in December, 13,145.

Our loss of tonnage in August and September was entirely chargeable to the increased differential. We have for years enjoyed a fair share of the slack business of certain large customers in the Cleveland territory. When the Wheeling & Lake Erie Railway reduced its rates August 1st, our regular customers ceased buying our coals and, upon inquiry, advised me that they could not resume purchasing our coals until the Pittsburgh & West Virginia [fol. 2072] Railway Company's rates were reduced and that situation continued until October 5th, when we were able to regain a large part of our lost tonnage.

We were not able to place elsewhere the tonnage lost in the Cleveland market during the period the 39-cent differential applied during these months of August and September. Present economic conditions are such as to make it extremely difficult to find new markets.

(1983) The loss of our slack market at Cleveland necessarily affected to some extent the sale of our prepared sizes. We normally screen our coal into four different sizes, lump, egg, nut and slack, all sizes being loaded into

railroad cars simultaneously. Inasmuch as the car storage capacity and no bill rating of each mine is limited, whenever our mine sidings below the tipple are full of cars loaded with slack coal or the number of cars of slack exceed the no bill rating of the mine we cannot ever produce prepared coal.

From January 1 to July 31, 1932, we sold 88,983 tons, of steam and domestic coal in the Cleveland, Lorain, and Huron markets, an average of between 12,000 and 13,000 tons a month.

Approximately 80 per cent of our market in Cleveland is slack; 15 per cent domestic and five per cent gas. As a matter of fact, Cleveland, while a large market for slack coal, is a very small market for Pittsburgh District high [fol. 2073] volatile domestic coal and in recent years the low volatile coals of southern West Virginia have largely monopolized the Cleveland domestic market. (1984) Low volatile coals bring a much higher price than does Pittsburgh high volatile coal and with a $2.64 freight rate to Cleveland against our former rate of $1.84, our high volatile coals could not freely sell in the domestic market in competition with the low volatile coals of southern West Virginia. Indeed, I do not believe that even with a $1.55 rate we can successfully compete with New River and Pocahontas coal in the Cleveland domestic market.

I am reminded that for the past two months, since October 5, when the 10-cent differential was restored by the Pittsburgh & West Virginia Railway Company, we have had an advantage over mines located on other railroads in the Pittsburgh district of 29 cents a ton to Cleveland. I am asked whether this advantage resulted in diverting to our mines any substantial amount of tonnage produced at the mines on other railroads in the Pittsburgh District. In the month of October we were not able to regain even our normal tonnage. In November we regained our lost tonnage and possibly added a few tons of coal, which, at even rates, would probably have been bought at mines on the [fol. 2074] other lines in the Pittsburgh District. The amount, however, was small. The tonnage that we regained came almost entirely from Ohio mines which had temporarily taken it from us.

(1985) From information obtained from purchasers of domestic coal, I estimate about half of the coal shipped

from Pittsburgh & West Virginia mines in the Pittsburgh District to Cleveland, Lorain and Huron comes from our four mines. Worked full time and at a full capacity, we might possibly add 200,000 tons to our present annual production, but because of inability to find a market for prepared sizes without which slack could not be produced, I seriously doubt if we could take any material quantity of Pittsburgh District coal produced at mines on other railroads.

Our company operates the Powhatan Mine in the Ohio No. 8 District served by the Pennsylvania Railroad. When the Pennsylvania Railroad reduced its Ohio No. 8 rates to meet the Wheeling & Lake Erie's competition, one of our large customers in Cleveland who customarily purchased approximately 2,500 tons per week of Pittsburgh District coal discontinued his purchases August 1st, bought 1,500 tons of this coal at our Powhatan Ohio No. 8 Mine, [fol. 2075] and this coal moved over the Pennsylvania Railroad. Other than that one instance, I have no information on the subject. All I know is that our Cleveland Pittsburgh tonnage all but disappeared during August and September and our customers told us that that was due to (1986) the reduced Ohio rate.

In the northern Ohio market, our company competes with the Ohio No. 8 and Cambridge coals in particular. We also compete to some extent with Hocking coals. Our competition with the northern Ohio coals in the Cleveland Market is the severest competition we have.

We also compete with coal produced in the Pittsburgh District at mines on other railroads.

Effective April 1, 1932, there were strikes in every district of the State of Ohio, and they lasted practically four months. The Hocking field was on strike for almost eight months. During the strike period, production in our Ohio No. 8 mine was reduced over 50 per cent.

The coal companies operating mines on the Pittsburgh & West Virginia Railway Company in the Pittsburgh District who actively compete with our company in the sale of coal in Cleveland, Lorain and Huron are (1987) the [fol. 2076] Clyde E. Speare Coal Company, with mines located west of Pittsburgh on the Pittsburgh & West Virginia Railway at Avella and Penowa, Penna.; the Crown Coal & Coke Company, with a mine located west of Pitts-

burgh on the Pittsburgh & West Virginia Railway at Avella, Penna.; the Continental Coal Company, with a mine located west of Pittsburgh, on the Pittsburgh & West Virginia Railway, at Avella, Penna.

Those companies have asked me to speak for them at this hearing and to inform the Commission that it would be impossible for them to sell their coal in the Cleveland market at a greater differential than 10 cents per ton. Those companies operate in the Avella district west of Pittsburgh and their coal is almost identical chemically with the better grades of coal produced in the Ohio No. 8 District.

We have recently sold some of our Pittsburgh District lump coal as low as $1.15. That is the lowest it has ever been.

[fol. 2077] R. A. ELDRIDGE was recalled as a witness, and having been previously sworn, testified as follows:

By Mr. Burgess:

(1989) I have already been sworn in this proceeding and I testified at the Columbus hearing.

Approximately 3,000 pounds, or 1½ tons of coal, is required in the by-product coke oven process to make a ton of coke.

As I explained at the Columbus hearing, we use very little coal at the Buffalo plant of the Republic Steel Corporation because in the open hearth furnaces our fuel requirements are obtained from fuel oil and not coal.

The amount of coke required in making steel at Buffalo would be the same as in other steel producing districts. In making pig iron, the coal required for the coke would be 3,000 pounds per ton, or about 1,500 pounds of coal per ton of steel.

In the operations beyond the blast furnaces, i.e., in the making of the finished steel products, we require at our Buffalo plant approximately 40 pounds of steam coal for a ton of finished steel. This, of course, includes coal used in locomotive cranes.

[fol. 2078] (1990) I am informed that Witness Kern's Exhibit 57 shows that for the year 1928, to coal tonnage moving

from the Connellsville District to Youngstown and Mahoning Valley district, was 3,994,212 tons.

In preparing exhibits and testimony in the ex-river Coal case involving rates from Conway and Colona to Youngstown, I secured various data from steel mills and other concerns showing coal received at Youngstown. The Connellsville coal that moved to the Youngstown Sheet & Tube Company for 1928, was 2,101,272 net tons, and the Connellsville coal shipped to the Republic Steel Corporation was 1,011,867 net tons, or a total of 3,113,139 net tons. This coal moved to the Youngstown plants of these two companies. Over two-thirds of the Connellsville coking coal moving to plants in the Youngstown Switching District was shipped to the Youngstown Sheet & Tube Company. That company, in 1928, obtained the major portion of its coking coal from the Connellsville district from the Nemicolin mine, which is shown under the designation of Number 32 on Mr. Hoffacker's Exhibit 148, and is shown under the same designation number on Mr. Durham's Exhibit No. 141. Mr. Hoffacker's Exhibit shows the 1928 production of this captive mine was 1,714,692 tons and that the daily producing [fol. 2079] capacity of this mine is 7,000 tons.

(1991) This coal from the Nemicolin mine for the past two months has been moving to Youngstown in two lots of about 5,000 tons each by river to either Colona or Conway and thence by rail from Colona via the P. & L. E. R. R. or from Conway via Pennsylvania Railroad. The distance via river from the Nemicolin mine to Conway is 95.7 miles, and to Colona 97.6 miles. The Nemicolin mine is in Pool 6 on the Monongahela River.

The only coal prepared to size is gas coal. Steam coal is either run of mine or slack, as is also the coking coal, and therefore, the coking coal and steam coal can be handled via river and rail without degradation. As I testified in the ex-river coal case, and I have covered (1992) it in that case, the coal tonnage moving from the Pittsburgh and Connellsville origins to Youngstown, alone, or to the Youngstown District, normally is much greater than the Lake Cargo coals moving from the same district. The Connellsville coal that moves to Youngstown moves principally from four captive mines. The movement from those mines would represent in normal years I should say greater than 90 per

cent of the tonnage of Connellsville coal moving into Youngstown.

[fol. 2080] In my testimony at the Columbus hearing I referred to a number of 70-ton axle capacity cars of the Pennsylvania Railroad and other carriers serving the western Pennsylvania coal producing districts. The carriers commenced to furnish such cars in volume from 1919 on. Now practically all of the coal that we receive is received in such cars.

(1993) I have prepared an exhibit showing the short tariff distance from all mines in the Connellsville district to Youngtown, Canton, Massillon and Cleveland. In preparing this exhibit, I obtained the list of mines on the Pennsylvania Railroad Coal Tariff AA I. C. C. No. 2035. This tariff, which names rates to points involved, lists the coal mines as well as stations in the district.

By various supplements, some mines have been eliminated from the tariff and others added. The supplements cancelling certain mines in the tariff usually show the reason for such cancellation, which is that the mine has been abandoned.

The lists of mines on the Baltimore & Ohio Railroad, Monongahela Railroad and the Pittsburgh & Lake Erie Railroad were obtained from various circulars listed on the exhibit as published by the Freight Traffic Department of [fol. 2081] the Pittsburgh & Lake Erie Railroad and the Accounting Department of the Baltimore & Ohio Railroad.

The Pittsburgh & Lake Erie Railroad Circular No. GFD 494, showing a publishing date of November 25, 1930, shows full information as to the names of mines, their location, owner, etc., that are located on the P. & L. E. R. R., Monongahela Railroad, Montour R. R., P. C. & Y. Railroad, P. & W. Va. Railroad. The B. & O. mine list, which is covered by their (1994) Accounting Department Circular No. NS. 100, and revised to April 1, 1932, contains similar information.

(Exhibit 347, Witness Eldridge, received in evidence.)

The distances used are the distances published in carriers' mileage tariffs, which, in many cases, show the actual distance from mines as well as from stations. This is true of all of the lines, with the exception of the P. & L. E. R. R. and the distances from mines on the P. & L. E., therefore,

are figured from the mine location shown in their circular or tariffs.

Page 7 of Exhibit 347, brings together the distances from mines on the various railroads and shows the average distance via the short tariff routes to the four destinations to which I have referred. I have prepared a similar exhibit [fol. 2082] showing the distance via short tariff routes from the Pittsburgh District to the same four destinations. It was prepared in exactly the same manner as the previous exhibit showing short tariff distance from the Connellsville district.

(Exhibit 348, Witness Eldridge, received in evidence.)

Page 6 of this exhibit shows a list of 16 mines located on the Pittsburgh & West Virginia. (1995) I understand that Mr. Paisley stated at the Columbus hearing that in Supplement 43 to P. & W. V. Tariff I. C. C. no. 225, which was issued October 17, 1932, they cut down their mine list to 12 mines.

I tested out what the effects of the elimination of four mines would be upon the average distance from the Pittsburgh District to Youngstown, and by eliminating those four mines, it reduces the mileage by 371.9, but it does not change the average from the group at all; it still remains 97.6.

I have prepared a statement showing the average distance via short tariff routes from active mines in the Connellsville District as shown in Witness Kern's Exhibit 39, to Youngstown, Cleveland, Canton and Massillon. The active mines used in compiling this exhibit were taken from Witness Kern's Exhibit 39, eliminating duplication.

[fol. 2083] (1995) (Exhibit 349, Witness Eldridge, received in evidence.)

For example: On page 18 of Witness Kern's Exhibit 39, he shows under mines located on the Baltimore & Ohio Railroad, the following mines: Irwin No. 11, Hayes No. 2, Revere and South Union. (1996) These mines are on the Pennsylvania Railroad and are also included by Mr. Kern on page 23 of his exhibit No 39. His reason for including such mines under the Baltimore & Ohio Railroad apparently was because the Baltimore & Ohio Railroad publishes joint rates from these mines to destinations on their line. How-

ever, in preparing this exhibit, I have shown them on the Pennsylvania Railroad because the short tariff distance applies via that route.

[fol. 2084] (1996) I have prepared a similar exhibit showing the average distance via the short tariff route from active mines in the Pittsburgh district to the same destination.

(Exhibit 350, Witness Eldridge, received in evidence.)

Referring to Witness Adell's Exhibit 194, a statement showing how the rates established from the Ohio No. 8 District to Cleveland, Lorain, Huron and Akron, Ohio, have been applied to intermediate destinations, which has the effect of establishing a group.

This exhibit, therefore, shows that average distance to which the reduced rates apply is considerably less than the average distance from the No. 8 Group to specific destinations of Cleveland, Lorain, Huron and Akron. Mr. Adell did not show the same situation with respect to the rates established to Canton and Massillon as the result of the Ohio Commission's order in Docket No. 7252.

(1997) Naturally a similar situation exists. A reduction in the rates to Canton and Massillon likewise reduced the rates to a great number of intermediate points and the average distances that we have shown and others have shown in this record from the Ohio No. 8 District are based upon Canton and Massillon only and not on the average distances to all of the points affected by the reduction in rates to Canton and Massillon.

An exhibit prepared similar to Mr. Adell's Exhibit 194 from Ohio No. 8 District to destinations taking the $1.08 [fol. 2085] rate established to Canton and Massillon would show that on the W. & L. E. Railway the reduced rate of $1.08 applies to Sherrodsville, Ohio, would be 39 miles less than the average distance to Canton.

To New Cumberland, another point affected, the average distance from No. 8 origin points is 33 miles less than to Canton; to Summerdale, 30 miles; Valley Junction, 28 miles, and Delroy, 31 miles less than to Canton.

In other words, the average distance from the points on the Wheeling & Lake Erie in No. 8 District to destinations taking the same rate as Canton and Massillon, ranges from 7 to 39 miles less than the average distance to Canton.

This is not only true of the rates from points on the Wheeling & Lake Erie Railroad but also of rates from points in No. 8 District on the Pennsylvania Railroad and the Baltimore & Ohio Railroad to destinations thereon.

(1998) For example: The reduction in rates from Ohio No. 8 District to Canton and Massillon affected the rates from No. 8 District to destinations on the Baltimore & Ohio, including such points as Uhrichsville, Ohio, New Philadelphia, Dover, Beech City and Valley Junction, Ohio. All of these points can likewise be readily located on Mr. Kern's Exhibit 14, and the average distance from the B. & O. mines to such points would range from approximately 17 miles to 35 miles less than the average distance to Canton and Massillon. Similar examples could be shown via the Penn-[fol. 2086] sylvania Railroad.

A similar picture could be shown with respect to the rates from the Middle District.

In other words, the rates and average distances which we have shown, and which the carriers have shown, are only to Canton and Massillon, the maximum distance points to which the rates required to be established by the Ohio Commission in Docket 7252, apply.

At the Columbus hearing I testified about the circuitous routes on the Pennsylvania Railroad in the Middle and No. 8 Districts to Canton and Massillon. There has been some testimony placed in the record in this hearing with respect to that circuity. (1999) In order to show it in Exhibit form, I have taken Witness Adell's exhibit 184 and have inserted the mileages for two-line routes, and the exhibit also shows the short tariff route. This I wish to introduce as Exhibit 351. The figures showing the short tariff routes were taken from Sheet 7 of Adell's Exhibit 184.

(Exhibit 351, Witness Eldridge, received in evidence.)

The short tariff routes are shown under the designation 1.

The short tariff route that I have shown on the exhibit, to Massillon, applying over the single line of the Pennsylvania Railroad is 50 per cent or more circuitous. On Canton I think it would be about 40 per cent or more. There are only six points where I have shown the reasonable direct route as being shorter than the actual existing short tariff route, namely, the last six points on the exhibit.

[fol. 2087] Exhibit 352 is a reproduction of Sheet 1 of Adell's Exhibit 184, taking into consideration the reasonable direct routes shown on my Exhibit 351.

(Exhibit 352, Witness Eldridge, received in evidence.)

(2000) At the bottom of Exhibit 352, where I say "Data taken from Exhibit No. blank," that should be 351. The balance of the figures were taken from 184.

Exhibit 353 contains similar information with respect to the Middle District.

(Exhibit 353, Witness Eldridge, received in evidence.)

In this case, particularly from the Southern portion of the Middle District, we find that the single-line route of the Pennsylvania to Canton and Massillon is up to 100 and more per cent circuitous. The short tariff mileages were taken from sheets 5 and 6 of witness Adell's Exhibit 187.

My next exhibit, 354, is a reproduction of sheet 1 of Adell's Exhibit 187, which shows the results by taking into consideration these circuitous routes.

(Exhibit 354, Witness Eldridge, received in evidence.)

In the blank space at the bottom, Exhibit 353 should be filled in.

(2001) There are some corrections that I would like to make in my direct testimony at the Columbus hearing. At page 826 of the transcript, in line 20, the year should be [fol. 2088] 1928, and not 1922.

On page 854, line 11, the transcript reads: "I. C. C. 182, I. C. C. 537." That should read, "Page 537" instead of "I. C. C. 537."

On page 856, the first line, right after the word "corporation," the words "at Moline, Ill.," should be inserted.

On page 868, line 21, the distance should read "43½ miles," and then insert the following: "From Dennison the P. R. R. single-line distance is 86 miles, and the distance via Uhrichsville and the B. & O. is 38½ miles."

Cross-examination.

By Mr. Bull:

I do not know that I could give a definition of a circuitous route and a reasonably direct route. My exhibit shows

certain circuitous routes that I think are unduly circuitous, because they exceed in most cases 50 per cent in circuity. On these exhibits I have considered as unduly circuitous all routes that are more than 150 per cent of the direct line.

By Mr. Ballard:

(2002) I believe my Pittsburgh figure is within a mile of Mr. Ackerman. That is, Pittsburgh to Cleveland. I remember it was very close.

I use the same formula that Mr. Ackerman does, that is, the list of mine origins and the short tariff routes. I used all of the mines named in the Pennsylvania tariff, and I think Mr. Ackerman used a list that was furnished him by the Pennsylvania Railroad.

[fol. 2089] The present movement of Sheet & Tube coal via the river and Nemicolin, that I spoke of, is moved from Conway or Colona on the ex-river rates prescribed by the Interstate Commerce Commission in I. & S. 3282. That movement has been going on, I think I said, within the last two months. (2003) I think the Commission's decision, naming those rates, was rendered in 1930.

There was no movement under those rates prior to that time. The facilities were only completed last year. The tariffs were published sometime around July.

As far as I know, all of the Nemicolin tonnage moved via the river to the Steel Company at Youngstown, during the last two months.

(2004) The distances which I show are not taken from Mr. Kern's exhibits. The distances I show I have checked myself. With respect to his short route distances, I do not believe we are very far apart, except on the Connellsville to Youngstown; by using all of the mines shown in the tariff mine list it reduces the distance somewhat. You get down to 140 miles, by using the short tariff routes instead of the tariff routes.

(2005) I said that I thought any route that was 150 per cent or greater in circuity was an unreasonably circuitous route. To be frank, I think one that is 40 per cent circuitous is unreasonably circuitous. With respect to my Exhibit 351, I would say that anything that is over 140 per cent of the short line is unduly circuitous.

[fol. 2090] Testimony Taken at Washington, D. C.
January 13, 1933

(Mr. Ballard stated (2015) that he would like to file as an exhibit an original certified copy of all of the testimony and exhibits of J. A. Scheuerman, Coal Freight Agent of the Baltimore and Ohio Railroad Company, in the proceedings before the Illinois Commerce Commission, Nos. 14395 and 14594. The exhibit, he stated, was offered to prove that Mr. Scheuerman, in the case referred to, offered in evidence exhibits showing coal rates throughout the state of Ohio and testified in connection with those exhibits that transportation conditions in Ohio and in Illinois are not sufficiently dissimilar to justify any difference in rate levels. Mr. Ballard stated that he considered the exhibit admissible on two grounds (2017): first, as an admission against interest by the Baltimore & Ohio Railroad Company, which is a petitioning respondent in this case, and, secondly, as evidence of the position of the Baltimore & Ohio Railroad Company as a corporation on that issue. Mr. Webber, counsel for the Baltimore & Ohio, objected (2017), and [fol. 2091] was joined in the objection by others. A debate ensued. Examiner Trezise stated that he believed the best way to introduce evidence of the kind would be by the witness himself, so that he could be cross-examined, and therefore the exhibit would not be accepted. Mr. Ballard excepted (2023, 2024). The Examiner ruled (2027) that the document offered would not be received in evidence nor made a part of the record, but that it could be marked for identification "Exhibit A, Counsel Ballard" (2028), and it was so marked.)

[fol. 2092] GEORGE DURHAM, having been previously sworn, was recalled as a witness, and testified as follows:

Direct examination.

By Mr. Martin:

(2029) At page 1019 of my testimony, in the line about the middle of the page, beginning "In that rule," the figure 80 per cent is not a correct transcription of my testimony. The figure should be 60 per cent.

Cross-examination.

By Mr. Orcutt:

When the Public Utilities Commission of Ohio reduced the rates from Massillon, Middle and Ohio No. 8 to Canton and Massillon, Ohio, that was the result of their hearing in the Republic Iron & Steel Corporation Case, (2030) in which our company was a defendant. We authorized counsel of the other carriers to represent us. My recollection is that in that case we offered no testimony of our own. We subscribed to the defense that the other carriers presented, to the extent of permitting them to represent us. We must have agreed with the defense to the extent of going along with the other carriers.

I have said that one of the factors taken into account in the determination of reducing rates from Ohio No. 8 to destinations in northeastern Ohio beyond Canton and Massillon was the effect of the ex-river rates. In the ex-river case, I. & S. Docket 3619, we expressed the position that the ex-river rates would not necessarily break down the rate structure.

Q. And the rates had not been in effect but a short time until you found it did break down the rate structure?

[fol. 2093] A. I would not say it necessarily breaks down the rate structure. I do not think (2031) that our reductions to points beyond Canton and Massillon from Ohio No. 8 should affect the rate structure at all.

I stated that if the $1.45-rate which we now have from Ohio No. 8 to Northeastern Ohio were increased it would probably shift the present rail tonnage to river mines who could load on the river in close proximity to our river division, barge a short distance, and load into cars and have the advantage of the ex-river rate. As to whether that would be true if the ex-river rates were advanced the same cents per ton as the $1.45 rate may be advanced as a result of this proceeding, if the ex-river rates were increased so that the combined cost of transportation from the Pittsburgh and Connellsville district was no less than the cost of transportation from the Ohio No. 8 District, it would probably (2032) not shift, and when I say the combined cost of transportation, I mean the cost of river towing, plus the cost of transfer, plus the freight rate for the rail haul portion of the transportation.

(2033) I said that in my opinion any substantial increase in the rate of $1.45 from the Ohio No. 8 District to Cleveland would result in the shift of the tonnage which had heretofore moved from that district to Cleveland, and other points, to the river mines on the Ohio River.

I am now asked, if the $1.45 rate is increased and if the ex-river rates from our river division are simultaneously increased the same number of cents per ton, there is any [fol. 2094] possibility of that shift taking place. There is a possibility that the transportation and handling cost on the Ohio River may be less than that which I have estimated it to be. I think there is a possibility of that—a probability of that. In that case the same amount of increase would not accomplish the result.

(2034) I think that under the present conditions, for example, from Pool No. 6, on the Monongahela River, the cost of river transportation to our river division may be a little bit less than I indicated it was in the ex-river case.

In connection with my Exhibit 157, I discussed the rate to Canton and Massillon which I show as $1.08, and stated that if that rate were advanced to $1.26 the tonnage would go to the river mines. I also discussed the cost of the through movement via river and rail to Canton, and indicated that the combined through cost was $1.20. I am asked if the $1.08 rate should be raised to $1.26, how that would make the tonnage shift to the river mines. That would mean that the cost of all-rail transportation would be 6 cents in excess of the cost of the combined river and rail transportation, from which I conclude that the tonnage would probably shift to the river mines. I think 6 cents might very well be sufficient to cause the all-rail tonnage to shift to rail and water.

If the present rate of $1.08 were increased to only $1.20 (2035) which happens to be the through water and rail cost, then, on the assumption that the present cost or the [fol. 2095] estimated costs which I have used for the towing and transfer is to continue constant and is not to be reduced, I should say there would be little probability of the tonnage shifting. I understand that in one instance it is being done for less than that now. I think that situation is even more acute than it appeared from my direct testimony. I used what I thought to be the maximum cost.

In referring to competition I stated that southern West

Virginia produces low volatile coal, while Ohio produces none, so that the railroad movement from West Virginia would not be affected by the disruption of the rates intrastate into Ohio. In making that statement I did not quite make the assumption that there was no competition between low volatile and high volatile coal. I did assume (2036) that the superior quality of the low volatile coal would enable it to continue to move against the differential.

By Mr. Day:

With respect to my Exhibit 141, a map, I am asked to state the location of the mines or shipping stations on our river division from which coal is picked up and assembled at Pine Valley.

(2037) There are no mines on the river division. There are shipping stations for ex-river coal at Terminal Junction and Mingo Junction.

Pine Valley is not the principal assembly point for our company in the No. 8 District. I think perhaps Adena assembles a larger volume of coal in the No. 8 district for our company than Pine Valley, or any other single point. [fol. 2096] So far as the movement of coal is concerned, Pine Valley is the principal train terminal in the Ohio No. 8 District on the Wheeling. The other assembly points in addition to Pine Valley in that district are Herrick, Adena and Kenwood.

The distance from Steubenville to Warrenton is 13.6 miles. The distance from Steubenville to Pine Valley is about 20 miles. (2038) The distance from Mingo Junction to Warrenton is 10½ miles, and Warrenton to Pine Valley 6½ miles. From Brilliant to Pine Valley is about 13½ miles.

[fol. 2097] (2039) We do not originate any all-rail coal at Martins Ferry. It is about 13½ miles from Martins Ferry to Pine Valley.

On my exhibit 146, the distance shown from Pine Valley to Cleveland of 138 miles, described as "line haul," is the distance from about the center of the yard in Pine Valley to the yard in Cleveland, where the coal is delivered.

There is sometimes a difference in the distance between stations, as compared with engine terminals. There is, generally speaking, a short distance from the point where

the locomotive is detached from the train until it gets to the engine house.

(2040) In Item D, page 1, my Exhibit 146, I use the term "through train," and in Items F and G the term "train." There is no distinction intended; it is the same thing.

In Item D I used 138 miles, line haul, as the divisor into the gross ton-miles. I am asked to explain why I do not use the total train miles loaded and light involved in the movement from Pine Valley to Cleveland, shown in Line C, page 1, of my exhibit. Because that is not the mileage that the through train actually makes. That mileage is made up of the extra mileage of the puller service between Pine Valley and Jewett. I am asked whether a through train is anything more than a theoretical train. These trains were operated through from the standpoint that the movement is through. In the case of puller service there [fol. 2098] is something more than one train, and that is compensated for fully in the cost.

(2041) As to whether it is not customary to divide the total gross ton miles by the train miles to obtain the gross tons per train, or, gross ton miles per train mile, as it is sometimes referred to, or commonly, train load, whether for individual trains or series of trains, this calculation takes into account all of the gross train miles produced by this movement, and the division into that gross ton mileage is made for the purpose of showing the units necessary to the transportation of a train of that tonnage from Pine Valley to Cleveland.

In developing the gross tons per train in Line D, pages 1 to 6 of my exhibit, we divided the through mileage into the average gross ton miles in order to obtain the average train for that gross ton miles.

I am asked whether I introduced in I. & S. Docket No. 3619 the series of exhibits in which my calculations of average gross ton miles per train mile were made by dividing the gross ton miles by the train mile. It is a long time since I put in my exhibits in I. & S. Docket No. 3619. My recollection is that we used substantially the same method of calculating the average train as we have used here.

(2042) I will check it. I do not just remember off-hand.

Mr. Day asserts that in the ex-river case, I. & S. Docket 3619, we obtained our average gross ton miles, per train [fol. 2099] mile, by dividing the gross ton miles by train

miles. (2043) I am asked why we proceeded differently in our study here from what we did in the ex-river case.

(2044) I am not able to say at this time that the formula I followed in the ex-river case was wrong or that this one we are now using is wrong, because I want to check the two and see what the difference is, if any.

I am asked whether in calculating our train load from Pine Valley to Brewster, shown at page 977 of the record in this case we did not use a part of the total train miles involved in the operation. We obtained the train miles. We used the train miles. Of course, we used the mileage made by the trains to obtain gross-ton miles. We did take the puller service into account.

(2046) As calculated here, the average gross tons per train mile are a different thing than the average number of gross tons per through train.

Q. In your Exhibit No. 40 in I. & S. Docket No. 3619, did you not calculate the average number of gross tons from which you determined the average number of cars per train by dividing the gross ton miles by the total train miles involved in the service?

A. I don't remember what I did there.

Q. May I show you the exhibit and ask you to look at line 1 at the bottom of the page and say whether or not that is true (exhibiting exhibit to the witness)?

[fol. 2100] A. Now, what is the question please?

(Question read by the reporter.)

The Witness: Yes, sir.

By Mr. M. Carter Hall:

On my exhibit 146 in this case, page 1, Item D, the last column to the right, the figure is 3661. That represents what I call the average number of gross tons per through train.

I am asked whether the figure on my Exhibit No. 40, in I. & S. 3619, (2047) on line 1, page 1, at the extreme right, at the bottom of page 4101, is not a corresponding or similar figure for the average number of gross tons involved in the movement which I was there considering. That figure, 4101, which I have now described as the average gross tons per train mile, is different from the figure which I show on the extreme right in my column D on page 1 of

my Exhibit 146 in this case, where it is there described as average number of gross tons per through train. It is different in this respect, that figure shown in Exhibit 40 is the average gross tons per train mile, and the other is the average gross tons per through train.

At Line E of Exhibit 146, page 1, the figure on the extreme right, 48, is what I claim is the average number of loaded cars used in my study. (2048) I am asked whether as to Exhibit 40 in I. & S. 3619, on page 1, the figure 53 opposite item 2, average number of gross ton miles, represents the average number of loaded cars per train mile in the study I was there making. It is per train mile in that [fol. 2101] case and per route mile in the other case. I am asked my definition of the difference between them. In one instance we used the total train miles, and in the other we used the route miles to obtain the average. In Exhibit 146 we have used the number of route miles to obtain the through train, and in the other case we have used the train miles in order to obtain the average number of cars per train mile.

I am asked whether in both cases I was attempting to ascertain the average number of gross tons per train and the average number of cars in the particular trains involved in the two studies. We finally worked it out to the same result. In both cases we were trying to get the same thing—the average number of cars per train. (2049) The method of reaching the calculation is not quite the same in each instance.

By Mr. Day:

In using, in my exhibit, total loaded train miles for road movement, plus loaded train miles for puller service, and empty train miles for light movement of the pullers, we wished to obtain the average tonnage for a through train.

I am asked whether it was not our obvious purpose, in using 63 train miles loaded movement as the divisor to determine the train load from Pine Valley to produce a much larger train load than would have been produced had we used the total train miles involved, including puller service, both loaded and light. We finally used the puller service in the next block. That is Section A-2. All the train miles, loaded and empty, are included in the calcula-

[fol. 2102] tion. If you take sections 1 and 2 together, it includes all of them.

By Mr. M. Carter Hall:

(2050) Referring to page 977 of the record in this case, and to page 1 of my Exhibit 146, I am asked if it is not the fact that in my testimony, and referring to the portion of the study from Pine Valley to Brewster, I testified that I arrived at an average of 4,856 gross tons per through train by dividing the aggregate sum of gross ton miles, made up, as shown, of loaded gross ton miles, 269,222, plus puller service ton miles, 36,697 by the average train miles, loaded movement only, from Pine Valley to Brewster. The 63 is not an average. That is the straight mileage from Pine Valley to Brewster. That is the route mileage.

Q. On your exhibit, page 1, you have it under the head of train miles and under the head of "Average" in Column 3. If you want to correct your exhibit, I would like to have you do it; but I am simply following your exhibit.

A. Of course, that is an average there, because all those trains, 162 trains, made the same 63 miles, and in that particular column (2051) it would be an average.

Q. It is an average, and you did use an average, and the average was 63, and it was train miles; is that correct?

A. The 63 miles that I used was not an average. It was 63 miles of route mileage.

[fol. 2103] Q. Then, you are now correcting your exhibit?

A. No, I am not.

Q. Does your exhibit not read "average train miles", in the last line of Block A, the figure being 63, and did you not use that 63 as a divisor into the total gross ton miles of the alleged through train from Pine Valley to Brewster, to which you were referring at page 977 of the record?

A. If you want to draw a distinction, I will say that the 63 that I have used is not that same 63.

Q. What 63 did you use?

A. I used the 63 from Pine Valley to Brewster.

Q. Where does that show on the exhibit?

A. It does not show on the exhibit.

Q. Then, in making your calculation of the gross tons per through train from Pine Valley to Brewster by the use of the 63 average train miles, as I call it, and the average line haul, as you call it, you do produce a greater train load

than you would if you had used the total train service involved from Pine Valley to Brewster, do you not?

(2052) A. If you are asking whether the product of 4,856 would be less if we had used all the train mileage consumed, instead of the 63 miles, I will say that it is greater than the product would be if you divided the total train miles into that.

By Mr. Day:

Referring to the trainload as determined in item D, page 1 of my exhibit, it is not a fact that by the use of 138 miles line haul as the divisor our purpose was to produce a [fol. 2104] greater train load than we would have produced had we used the total train miles as a divisor. The purpose of that was to show the average train. In our costs later on we pay for all the train miles we use.

If you divided the total train miles into the total gross ton miles, that would produce a lower number of tons per train than the use of 138 miles line haul. A lower train load.

(2053) In item E the use of the average train load of 3,661 gross tons produces an average number of loaded cars per train of 48. If the average load had been less than 3,661 tons, the number of loaded cars per train would have been lower than 48.

(2055) There is no error in the calculation in item E. If there was, of course, it would necessarily be reflected in items F, G, J, K and L. It would necessarily be reflected in the subsequent calculations. If there was an error in the average number of loaded cars per train of 48, it would follow necessarily that my net tons per train, gross tons per train, gross ton miles and car miles would also be in error.

(2056) With respect to pages 2 to 6, inclusive, of my exhibit 146, the average train load is computed in the same manner. That is, by the use of the line haul service involved, instead of by using the total train miles as a divisor.

Referring to line A-2 (6), page 1 of my Exhibit 146, I am asked whether the locomotive miles—the average locomotive miles—14.8, shown in column 5, should not agree with the average locomotive miles, light movement, puller and helper service, shown in column 9. That is, should not the [fol. 2105] loaded movement of these particular locomo-

tives balance the empty movement, or vice versa? No; I think that is explained in the testimony by the fact that in some instances these trains returned from Jewett to Pine Valley with loaded cars (2057), or with some other class of freight, which is not, of course, charged to the transportation cost of coal. In other words, I have taken into account the consist of these pullers in the return movement, and that explains the disparity between the loaded and the light movement. In some instances they handle trains from Jewett to Pine Valley or to Adena or to some point east of Jewett. Those average gross ton miles eastbound were not included in my total.

Generally speaking, the movement of the puller on a typical day is that the puller starts from Pine Valley and may get a portion of its train at that point and pick up at Adena and Kenwood, go to Jewett, set out the train. (2058) The freight picked up would be coal with the rare exception of an occasional car of something else. It would go to Jewett and set out the train and return. It might return to Kenwood and might return to Adena and pick up another train and take it to Jewett and in all probability return from there to Pine Valley. Sometimes a third trip may be made.

Such a movement would exactly equalize the locomotive mileage east and westbound. Now, on an occasional trip there would be loads set off at Jewett, and perhaps some empties, to be returned or to be moved from Jewett to Pine Valley, or in the case of empties from Jewett to Adena or [fol. 2106] Kenwood. In that connection, we have not charged the movement of the puller against the transportation of coal. That explains the difference between the 14.8 and the 12.4.

A movement such as I last described from Jewett to some point east of Jewett does not occur every day. It occurs occasionally, and the number of times it occurred in the period studied is reflected in the study. (2059) This is not based on an estimate of when it occurs, but is actual movements.

I am asked what, in the case of 100 empty cars which I stated can be hauled from Cleveland to the mines with one engine and crew, becomes of the engine which brings up to Cleveland only 48 cars in its train. It brings up 48 cars. I am asked concerning the return of the engine that goes

back without any cars. The return movement of empties is a calculated return movement. That is explained in the study. There are no trains—with very rare exceptions—handling 100 cars, from Cleveland to Pine Valley. But I explained in the testimony that we do sometimes have engines handling 100 cars from Huron to Pine Valley.

(2060) It is a fact that for every engine hauling coal into Cleveland and these other destinations there must be a corresponding return movement of that engine. I am asked if this locomotive and crew mileage should not have been [fol. 2107] accounted for in my exhibit. This locomotive and crew mileage is accounted for in my exhibit in the return movement of the empties. We have calculated the cost of returning the empties so that it fully covers the cost of doing that work. I think that is quite fully explained in my testimony starting on page 1028.

Q. What I am getting at is simply this, Mr. Durham: Your loaded train performance is based on the handling of 48 loaded cars into Cleveland. Your return movement is based on handling 100 cars of empties behind a locomotive, back to the mines. Now, my question merely goes to this: What happens to the crew and locomotive that handled the other 52 cars of coal into Cleveland or one of these other destinations? In your study, of course, I mean.

A. The use of the 100 cars is for the purpose of determining the number of train miles and locomotive miles necesssary to the return of the 48 empty cars, and that calculation is clearly set forth in item L on pages 1 to 6 of exhibit 146.

Q. If 48 loaded cars are hauled into Cleveland by one engine and crew, necessarily that engine and crew must return to the mines; must they not?

(2061) A. Well a crew must go to the east end and get every 48 cars that are moved up there, assuming that there are 48 cars.

And of course that same engine must go back to the mines in some way.

It is pointed out that in my study I have put 100 empty [fol. 2108] cars behind one engine; yet that engine only brought up 48 cars. I am asked to explain how I account for the other 52 loaded cars which went up there, in the return movement. I have explained that we have calculated the service units necessary to the return of the 48

cars from Cleveland to Pine Valley by using a train consisting of 100 empties. Now, as a practical matter, those empties are returned in trains handling other freight. So that to that extent we have over-stated our cost, and that is shown on the pages to which I have referred. My study is not predicated on a locomotive handling 100 empties from Cleveland back to the mines. A locomotive moving 67 miles will produce the gross ton mileage necessary to the return of 48 empty cars from Cleveland to the District. (2062) My cost study is based on one locomotive handling 100 empty cars for a distance of 67 miles, which would produce the same number of gross tons miles necessary to the return of the same empty cars from Cleveland to Pine Valley. 67 miles is the number of locomotive and train miles necessary to produce the same number of gross ton miles required to return 48 empty cars from Cleveland to Pine Valley; the train moving the 67 miles having 100 empties in it, and the statement further on shows that is very conservative and overstates the cost. The 67 locomotive miles and the 67 train miles are the locomotive miles and train miles necessary to produce 137,890 gross ton miles by the locomotive and train moving 67 miles. The 137,890 gross ton miles is the number of gross ton miles necessary to the [fol. 2109] return of 48 empty cars from Cleveland to Pine Valley, or the movement of 48 empty cars from Cleveland to Pine Valley.

(2063) The actual route distance, according to my exhibit, is 138 miles. As a matter of fact, on an average, those empties do not move that distance.

Q. And this 67 miles is arrived at on the basis of 100 cars per train in the empty return movement?

A. It is based——

Q. (Interposing.) Look at Item L.

A. I understand what it is all right enough; but I am trying to get it so that there is no question about the understanding here. If we move 100 empty cars for a distance of 67 miles, it produces 137,890 gross tons miles; and that is the number of gross ton miles that are necessary to the return of 48 empty cars from Cleveland to Pine Valley.

Q. But you arrive at the 67 miles as the return distance from Cleveland to Pine Valley by using 100 cars in the train as the basis?

A. I produce the same number of gross ton miles that are necessary to the return of 48 cars.

Q. Page 1 of your exhibit, Item L-1, shows that it is figured on the basis of 100 empty cars per train, does it not?

A. Moving a distance of 67 miles, to produce 137,890 gross ton (2064) miles, which is the number of gross ton miles necessary to the return of 48 empty cars from Cleveland to Pine Valley.

Q. In other words, this 67 miles reflects the proportion of 100 cars in the train to 48 cars, which were the loaded cars [fol. 2110] used in your study in the going movement?

A. It is just exactly what I have said it is. We figure, first, the number of gross ton miles necessary to return 48 cars from Cleveland to Pine Valley. Then we start out to find how far we will have to haul 100 empty cars in order to produce that same number of gross ton miles, and we determine that to be 67 in this case. The 100 cars are figured as being in one train, in order to produce 137,890 gross ton miles, which is the number of gross ton miles necessary to return of 48 empty cars from Cleveland to Pine Valley.

Q. Assuming, as you say, that there are 100 cars, empties, handled per train, can you now explain how you account for the return of the engine and crew handling the 52 other cars?

A. I have not said that we handle 100 empties per train, and I will not say it.

Q. No; but your study is based on 100 empty cars being handled per train?

A. That is used as a calculation to show the number of service units necessary to produce the number of gross ton miles, that are necesssary to the return of 48 cars from Cleveland to Pine Valley. Now we are not running any train (2065) of 100 cars from Cleveland and running it 67 miles and just letting it disappear in thin air.

Q. The point is that you are computing your return movement on the basis of 100 cars in a train?

A. Yes.

[fol. 2111] Now, then, your loaded movement study is based on 48 loaded cars in the train?

A. That is correct.

As to where in my study I account for the return of the engine and crew with the other 52 cars, this is merely a

calculation. As a practical matter, the cars are returned in regular trains at a very much lower rate than is shown here. Ordinarily the train that brings the cars up to Cleveland is the train that brings them back.

(2066) I think that by my explanation and by this exhibit it is indicated that as a matter of actual practice the return movement of our empties would be at a lower cost than I have ascertained by means of my constructive study. My reasons for thinking that the actual cost of the return movement per unit would be less than shown on my exhibit are explained beginning with the second paragraph on page 1028 of this record (2067).

(2068) I will give the tonnage rating for the locomotives having 88,383 pounds calculated tractive effort, which is the type of locomotive used in the study from Pine Valley to Brewster. In some instances the study, from Brewster to Cleveland, has locomotives of slightly less tractive power. The calculated tractive power of the locomotive, working in compound, is as follows: Pine Valley to Rexford, 3,500 gross tons; Rexford to Brewster, 7,020 gross tons; Brewster to Canton Yard, which is Gambrinus, 3,810 gross tons; Canton Yard to Kent, 5,385 gross tons, Kent to Cleveland Yard, 6,445 gross tons.

[fol. 2112] There were some other type locomotives used in the study between Brewster and Cleveland. I do not have the numbers of those locomotives or the tractive power; but I can furnish you that information. (2069) In the movement up to Brewster it is confined to this one 88,383 type. So far as the movement up to Brewster is concerned, that is the only kind of engine covered by our study; it is the type of locomotive used in the transportation of our coal.

I will give you the locomotives used, the tonnage ratings and the tractive power of them, from Brewster to Cleveland, and will state between what points they enter into the study. I will have to furnish that information to you later. I have the engine ratings, but I do not have the number of each individual locomotive here now.

(2070) I can give you the tonnage ratings for the reverse movement of the locomotives from Cleveland to Pine Valley; I mean of the locomotives having 88,383 pounds tractive power. Cleveland to 93rd Street, 2,073 gross tons; 93rd Street to Brewster, 3,170 gross tons; Brewster to

Jewett, 5,920 gross tons; Jewett to Rexford, 3,905 gross tons; Rexford to Pine Valley, 8,875 gross tons. 93rd Street is in Cleveland.

The movement from 93rd Street to Cleveland Yard, the westbound movement, does not enter into it. The same tonnage that is handled from Kent to Cleveland is likewise handled from 93rd Street to Cleveland Yard.

[fol. 2113] I may say that our time table contains engine ratings for our entire line, and I will be very glad to furnish the necessary number of copies of the time table for introduction in evidence. (2072.)

(2073) It is pointed out that our engine rating from Rexford to Brewster is double what it is from Pine Valley to Rexford. As to whether there is tonnage available at Rexford with which we could so increase the actual tonnage carried in our trains, that is handled, as I have already explained, by a puller from the Pine Valley District over to Jewett. That puller is simply operated in lieu of a helper engine. We could just as well perform that service by using a pusher engine from Adena and Rexford and then we would have no train miles in that particular section and we would simply have pusher miles, but it has been found more convenient to operate puller service so as to fill out these trains at Jewett. Aside from the question of tonnage in the train, there is no particular tonnage produced at Rexford as an origin. But as a practical matter, of course, Pittsburgh Junction is between Rexford and Jewett. That junction is about three-quarters of a mile west of Rexford (2074) at approximately the top of the hill and we do get some additional tonnage from the Pittsburgh & West Virginia, which is at times used for filling out trains starting from Pine Valley or from Mingo Junction or from Terminal Junction.

There is not always tonnage available at Canton, where our engine rating is increased from 3,810 to 5,385 tons. [fol. 2114] That is usually handled by a helper engine from Brewster to Canton if we have more than the Brewster to Canton rating.

At Kent, where the engine tonnage rating increases from 5,385 to 6,445 tons, there is a small amount of traffic received from the Baltimore & Ohio, and sometimes the Erie,

and I could not say as a practical matter there is enough to fill out all trains to that full tonnage.

I do not believe our time table indicates the engine tonnage ratings on the branch from Sherrodsville up to Canton. That is a branch that is handled by local service and very little tonnage is handled that way. I will give you the engine ratings on that branch later. (2075) Of course there is no through traffic handled over that line.

We get some coal from the New York Central at Minerva, but it is not handled from Sherrodsville to Canton. It is handled from Minerva to Canton on that branch, but the tonnage on that branch would not reflect the grade line from Minerva to Canton. I will get that information for you also.

As to whether there is any movement of our No. 8 coal, or any other coal, there is an occasional car of Middle District coal which moves from the Sherrodsville Branch to Canton, but there is not very much. It is handled by local trains though. There is one small mine on that branch, I do not know just what it is doing at this moment. It is located approximately at the point where Dellroy is shown on the Carrollton Branch. (2076) There is a small production there. Ordinarily there would be no coal from Ohio [fol. 2115] No. 8 handled over that branch, unless it be coal originating on the New York Central but that would not be handled over the entire Carrollton Branch. It is called the Carrollton branch between Carrollton and Canton.

Trains operating between Brewster and Cleveland, having more than the tonnage rating from Brewster to Gambrinus, are in all cases where they have more than that tonnage rating given a helper from Brewster to a point about 2½ to 3 miles east of Gambrinus—between Gambrinus and the station shown on there as Navarre. That helper engine starts out with a train at Brewster and runs (2077) to Kemery. When it is released at Kemery, the helper engine is sometimes used to help a train in the other direction. If it is not used in that manner it goes back to Brewster. There is a grade between Navarre and Harmon, in the reverse direction. As to whether the practice ordinarily is to render such helper service in the reverse movement, part of the time it requires helper service, depending upon the necessities of the situation. I am not able to state any more definitely other than to say

that on certain occasions such helper service is required eastbound. I think perhaps on rare occasions that trains doubles into Gambrinus. I would not think that would happen as often as once a month.

(2078) During the period covered by my study, I do not think the Wheeling & Lake Erie handled any coal from Martins Ferry through Warrenton and Pine Valley to Cleveland and other destinations—unless it would be coal received from connections, and I cannot think of any coal that might have been received from connections. If there [fol. 2116] was such coal so received it would be handled in the regular train. We have regular service operating both out of Mingo and Martins Ferry, and if there would be any coal in that territory, and there now is from the ex-river coal, it is handled at Terminal Junction, which is approximately the same as Martins Ferry, as the Terminal or yard, or, to use another term, as the assembly point. We would not take it to Pine Valley. The train handling such coal would not be a local. There is a through service from both Mingo and Terminal Junction, which is the same as Martins Ferry. That service is for the purpose of accommodating the shippers from the Wheeling district.

(2079) Considering line haul service alone, it costs us more to handle coal from Mingo Junction to Cleveland than from Pine Valley to Cleveland. The extra distance, considering line haul service, would make the cost greater. The same is true, considering line-haul service alone, from Martins Ferry to Cleveland, than from Pine Valley to Cleveland.

One of the points at which coal was produced on our branch line from Neff to Adena during the period of this study is at Clarkston. The distance from Clarkston to Adena is 10.1 miles. Somers No. 6 is two miles from Adena. I believe those are the only ones that are on my study producing coal during the period of this study. That is all I know about, those two mines.

[fol. 2117] (2080) The distance from Neff to Adena is about 20 miles. We did not get any coal at Neff during the four months' period of this study, but it is a fair statement that there is a mine operating in there at this time. The only active mine that is on that branch is the mine of the Pursglove Coal Mining Company. That was

opened in September, 1931. It is approximately 18 miles to Adena from the point at which that mine is located.

(2084) Coal originated at Neff to Adena would be brought over the Adena branch to Neff and assembled for westward movement. The mine crew train would haul it to Adena. The same sort of crew handles the coal from the other intermediate points into Adena. As to the cost of handling coal originated between Neff and Adena, the coal coming from Clarkson was included in our assembly service—just that one point.

My attention is called to the testimony of the witness for the Goodyear Tire & Rubber Company who referred to mines as far away as five miles from Adena. That would not be on the Neff branch. It is 5½ miles from Adena on another branch called the A. C. & N. A. which leads out just above the name shown as Robyville.

(2082) The assembly service on the line from Neff to Adena was included in my figure of 4.5 miles shown in Item K, page 1 of my Exhibit 146. The distance from Clarkson was included, and also from Somers No. 6, which were the only active mines at that time on the branch.

[fol. 2118] You are correct in understanding that I testified that only 25 per cent of the total coal originated by the Wheeling in Ohio No. 8 District was assembled at Pine Valley. No coal originated on the River Division. The originated coal included in the study west of Warrenton, Nicholson, (2083) Bainbridge No. 2, and Dillon No. 1. Dillon No. 1 is west of Pine Valley. It includes in addition to the line between Warrenton and Pine Valley the mine at Dillon No. 1. It is west of Dillonvale.

The bulk of the coal assembled at Adena comes from Wheeling Township, which is on the A. C. & N. A. That is the branch that I referred to as the one going off just above the name Hurford; also Clarkson Mine, Somers No. 6, and Dale Mine, which latter is located near East Cadiz. I am mistaken about hauling that back from East Cadiz to Adena. That is assembled at Kenwood.

I think the coal assembled at Adena also includes the Stellar mine, located near Robyville, on the branch that runs to Neff.

(2085) There is no active mine at the present time on the branch that extends almost directly northward from Hurford.

The puller service that I have described from Pine Valley to Jewett is something more than a mine run service. It takes the place of what might be a helper service in a slightly different kind of an operation.

I have information here with respect to separation as between Herrick, Adena and Kenwood, of the 75 per cent [fol. 2119] of the No. 8 District coal originated by our company which is assembled at those three points. There was assembled at Pine Valley, 4,827 cars; at Herrick, 253 cars; at Adena, 6,603 cars; and at Kenwood, 6,381 cars. That is for the four months' period covered by the study.

(2086) I do not have information as to what proportion of the coal originated by the Wheeling in Ohio No. 8 originated on the branch from Neff to Adena during the period of the study. We will furnish it to you. Also the proportion that originated at mines on the line from Pine Valley to Kenwood. We will furnish that information too. [fol. 2120] Referring to pages 1 to 6 of my exhibit 146, I am asked whether during the period shown, there were any other trips that puller crews performed between Pine Valley and Jewett. I think there were; I feel quite sure of it. These other pullers handled coal from No. 8 District probably, for some of the other destinations shown. They were not included in the study because we were just taking a certain number of pullers (2087), enough pullers to match up with the through trains.

The trains shown on the exhibit as operated between Pine Valley and Brewster, during the period of the study, were not the only trains operated. I feel very sure that other trains handled coal from Ohio No. 8 for the other destinations shown. We did not include those in the study, because we tried to get representative trains. There would be trains moving in there that would have coal along with other commodities. For illustration, the trains moving from Mingo Junction and Terminal Junction through Brewster would be filled out with coal perhaps at some of these assembly points and perhaps at Jewett and we did not consider that those were representative trains as to the movement of coal from the No. 8 District to these points.

(2088) I would not know how many trains were omitted from the study. I would rather not guess at the number of regularly scheduled trains that we had during that period. I will furnish the information, and also tell you

what character of trains those other trains were—whether time freights or locals, extras, and so forth.

(2088) It is not a fact that we selected trains with the maximum tonnage of coal rather than representative [fol. 2121] trains. I stated that I selected representative trains, and I also stated in the record the number of cars, the range of the number of cars in the train. If 99 per cent of the consist of our trains was coal, that does not indicate that they are not representative trains. That indicates they are representative trains because there is very little freight originating in the district except coal. I would not say that 99 per cent of our cars ordinarily moving over this route from Pine Valley to Brewster for instance would be coal in any train. (2089) There are trains that originate east of Pine Valley that would be moving over that territory that would not have as high a percentage of coal as that.

If we had time freights operating over that line under regularly scheduled service, those trains would contain a much smaller percentage of coal than the trains I used. I am sure they would. The selection and use of those trains would not be more representative than the solid trains of coal that I have selected. It would not represent the facts at all with respect to the particular operation that we are intending to describe.

(2090) I am asked if I may be understood to mean that the total movement of coal tonnage from Ohio No. 8 District to these destinations as in fact distributed between the trains that move it, would not be as representative of actual conditions as selected trains of more than the average number of cars and containing 99 per cent coal. I would say that the selection or inclusion in those trains that only occasionally fill out with coal would not be a fair representation of the service in handling coal from the No. 8 District [fol. 2122] to the destinations. It is not correct to say that our selected trains contained more cars than the average train from the points of origin involved and more coal than was contained in the average train involved. I am asked, then, if the trains that I selected did not contain any more coal than the trains which I did not select, why it would not be fair to use all trains that move in order to determine the actual conditions and the actual cost of movement of all of the coal. Our purpose was to select trains that were

representative in the movement of coal between the points. It would not be fair to include in that trains that started from points beyond there and occasionally picked up coal in the No. 8 District. A part of the coal moving may move in those trains. Nothing could be further from the facts than Mr. Hall's statement that what the study shows is cost as applied to the concentrated movement of our coal under most advantageous conditions that we could find from Ohio No. 8 to destinations involved. I am asked what coal we excluded from the study except coal which I have just described, which originated at points east of Pine Valley and moved toward Pine Valley in mixed trains or merchandise trains or trains of a character other than those which I selected for the purpose of my study. As I said before, we selected representative trains moving from Pine Valley through to these destinations, trains representing the average service, not specially selected and the most advantageously selected. I did not say that the trains (2092) contain more than the average number of cars contained in all of the trains that move generally between Ohio No. 8 and the same destinations used in the [fol. 2123] study. I think that the average of these trains represents the average of all trains moving from Ohio No. 8 to these points. The average train that I use, which was 48 cars, does not contain a heavier tonnage of coal than the other trains which move either from Pine Valley or other points in that same district during the same period to Cleveland. The trains that I have selected represent the average of trains moving from Pine Valley through to these destinations. It is true that I have left out of the study the trains which originated east of Pine Valley and picked up part of the coal—because they are not representative of the service. I do not think the cost of hauling that coal would be higher than the cost which I have shown in my study.

(2093) The exhibit does not include all the trains operated, during that period shown, between Brewster and Cleveland. There might have been some coal from Ohio No. 8 to the destinations involved herein in the other trains that moved. I am sorry I am not able to tell you the consist of all the trains on the railroad during that period. I am not able to say whether there was one or 30 cars of coal in the other trains, assuming a 50 car train. I have

no information at all as to the consist of the other trains.

(2094) Our railroad, in connection with the Pittsburgh & West Virginia Railroad, maintains a fast daily merchandise freight service from the Pittsburgh industrial district to Canton, Akron, Cleveland, Toledo, and other destinations. Those trains are operated on fairly regular schedules. We try to keep them so; on daily schedules, except very rarely when there is no business one may be annulled. The usual thing is for them to run every day.

[fol. 2124] Those trains might occasionally handle some coal from the No. 8 District for some of the destinations involved in my Exhibit 146. They are not all included in the exhibit. Some of the trains that handle the fast freight would be, I believe, included in the trains between Brewster and Cleveland.

(2095) Coal originating on the Pittsburgh & West Virginia in the Pittsburgh or other districts is received on our line at Pittsburgh Junction. I do not know how the coal is handled by the P. & W. V. up to that point. Sometimes that coal received by our company in Pittsburgh Junction is delivered on our interchange tracks, and sometimes it is moved in through trains. I should say that Pittsburgh Junction has an interchange capacity of 125 or 130 cars. There is no yard there; it is just a couple of side tracks.

(2096) I do not have in mind the average daily interchange received from the P. & W. V. at Pittsburgh Junction. I would not want to say whether the interchange from the P. & W. V. is 10 cars or 100 cars per day. There may be some confusion, Mr. Day, with respect to your understanding that there was a substantial amount of interchange between our company and the P. & W. V. A great deal of the coal and a great deal of the general traffic that comes to us from the Pittsburgh & West Virginia moves directly through there and is not set out. That is the general practice. Sometimes, as I say, the coal is brought over there and set off at these interchange tracks and picked up by one of our through trains, but a great deal of it moves in through trains. The coal that comes to us [fol. 2125] in through trains has the interchange performed at Pittsburgh Junction. The crews do not change at that junction; the P. & W. V. crews run through, to

Brewster. That is under the operating contract to which you referred a while ago. That is true in the handling (2097) of the through freight received from the P. & W. V., generally speaking; there might be some exceptions. Occasionally we receive cars from the interchange tracks but very rarely in anything except coal.

I do not have the tonnage rating limit we place on the P. & W. V. locomotives between Pittsburgh Junction and Brewster. I would be very glad to get that for you.

(2098) I will also furnish the amount of coal tonnage delivered by the P. & W. V. to the Wheeling & Lake Erie during the four months covered by my study, separated first as to the tonnage received at Pittsburgh Junction, and, second, as to the tonnage received at Brewster. It will take a little time to work that out.

(2099) I think that our company, at the present time, is handling the greater part of the tonnage originated on the P. & W. V. going to Cleveland, Lorain, Huron, and so forth. I think we will be able to furnish for the record information as to how much of the P. & W. V. coal, that is, interchange coal, was included in the trains covered by pages 1 to 6 of my Exhibit 146.

(2101) I would not be able to tell you whether, if we had received all the coal from the P. & W. V. at Pittsburgh Junction or other interchange points, the unit cost shown on my Exhibit 146 would have been greater or less.

[fol. 2126] My attention is directed to page 981 of the record, where I say that during the four months of the study a large amount of coal tonnage was moved on two regularly scheduled trains designated as Nos. 191 and 195. I am asked to describe the operation of those trains. Both trains are handled in substantially the same way. They are made up in Brewster yards and move to Gambrinus, which is the yard serving Canton. I am asked whether they are strictly local trains and not trains having origins on some other road. They originate at Brewster (2102), are made up in Brewster Yard; and such cars as are consigned to Canton would be set off at that point. Any cars at that point to be moved north or west would be picked up. Any cars that might be in the train for Akron would be set off at Mogodore. If there should be any cars for Kent, either to be set off or picked up, they would be either set

off or picked up and the train moved to Cleveland. That is substantially the movement of trains 191 and 195.

The schedule of those trains does not contemplate any through movement from Pittsburgh or a point on the P. & W. V. It is entirely detached from any other railroad.

(2103) As to the consist or makeup of those particular trains, 191 and 195, they will handle any freight moving. If it should be steel products, brick, coal, and so forth, they would handle it. They are not primarily merchandise trains or perishable trains; they are operated to handle any kind of freight. There is no car limit placed on them except as the tonnage limits the train. They reflect only the ordinary engine rating.

[fol. 2127] The schedule of the two trains begins at Brewster. No. 195 is shown on the time card as scheduled to leave Brewster at 6:30 P. M. No. 191 is shown on the time card as scheduled to leave at 10:00 A. M. They may or may not leave on that time. The scheduled time of leaving is influenced by the accumulation of business from both the east and west, and south. (2104) Of course, those trains would handle, at times, freight coming from the portion of the line extending down to Zanesville.

I am asked if trains 191 and 195 are not part of an advertised train service from the P. & W. V. Traffic moving from the Pittsburg & West Virginia might be handled in these trains, but the volume of it, in so far as expedited service is concerned, is not important enough to justify thoroughly prompt and exacting movement. As to whether it is not an advertised train service in connection with the P. & W. V. the traffic department solicits freight on the basis of a reasonable service, but it is not the exacting service which we have in connection with the P. & W. V. through to Toledo and, of course, carrying freight to, say, Michigan points.

(2105) Our company does not maintain a service whereby, a car leaving Pittsburgh at four or five o'clock in the evening will get to Cleveland the next morning. The scheduled arrival time of train is 12:30 A. M. Of train 191, its scheduled arriving time is 2:00 P. M.

I do not know whether or not it is a fact that all of the coal originating on the P. & W. V. and contained in trains 191 and 195 during the periods embraced in my study was included in this study.

[fol. 2128] We have local service from all of the Wheeling & Lake Erie Railway divisions covered by this study, and in that local service the trains might at times handle coal from the Ohio No. 8 District. I would say that that is not customary for local trains to handle coal for destinations shown on Exhibit 146. I would want to limit that (2106) and say that they might occasionally do that.

In connection with page 7, Block A-2 of my Exhibit 146, our company keeps its figures of track maintenance separately as between road and yard. I have separate figures for yards in my study. We have yard tracks located in here. All of our yards are included in the study. We have a yard in the vicinity of Toledo.

We have two operating districts between Pine Valley and Cleveland; one from Pine Valley to Brewster and one from Brewster to Cleveland. (2107) All of our maintenance is in charge of one engineer. We do not have a division of maintenance districts. We lump it all in one.

(2107) In connection with Block A-1 on page 7 of the exhibit, I am asked how the distribution of total yard track maintenance is made between freight and passenger service. I do not have that figure, but I will get it and give it to you. It is made in accordance with the Commission's classification for the distribution of accounts.

None of the locomotives on the Wheeling & Lake Erie are entirely assigned to passenger switching service. I am asked, where switch locomotives are performing both freight and passenger service how the hours are allocated [fol. 2129] to the two services. My recollection is that we charge no switching service at all to passenger service. We have very little passenger service. I will check that and let you know.

Concerning A-2, the distribution of the item "Other Track Maintenance" between freight and passenger service is made in accordance with the Commission's requirement for distribution.

The fuel is measured to the respective service in accordance with the Commission's requirement. My recollection is that the Commission requires that. If I find that it is different, I will let you know. Item A-3, maintenance of station and office buildings, is all charged, in this instance, to freight service.

With respect to item A-7, I am asked upon what basis 62½ per cent of the total expense of telegraph and telephone lines is assigned to Account No. 247. (2109) We charge to dispatching trains, exclusive train dispatching, 960.20 miles, and to dispatching trains 50 per cent of 1,189.85 miles of line; total charged to dispatching of trains, 1,555.12 miles; exclusive of other purposes, 337.40 miles, and then 50 per cent for other purposes—50 per cent of 1,189.85 miles, or 594 miles. The general foreman of telegraph and telephone lines estimated those percentages.

The charges to the item A-8 are divided between the various accounts to which reference is made on that line in the proportion as the other charges have been made.

It is stated that Account 249, signals and interlockers, is included in "all other" accounts for maintenance of way and structures. I am asked where and for what purpose [fol. 2130] signals are used in connection with coal and ore wharves. We do not charge coal and ore wharves with any proportion of these other accounts. Coal and ore wharves would not be charged to signals. The 645,705 dollars shown in Column 1 of Line A-8 is broken down and distributed. I do not find any detail (2110) where a distribution was made to coal and ore wharves. Undoubtedly they would be entitled to have a percentage of this $645,705. Now as I understand it you are inquiring as to the propriety of charging a proportion of the $14,581 that was the charge to signals and interlockers against coal and ore wharves. (2111) It is true that a very small proportion of that may have been charged, but it is very insignificant of course. The coal and ore docks on our line are operated through contractors. Part of the work of maintenance is done by the contractor and part of the work is done by the company. I think the limit of the contractor's maintenance is the reasonable cost of upkeep on the coal and ore machinery. (2112) That is my best recollection of the terms.

The Item A-8, "All other" charges for maintenance of way and structures, include maintenance of joint tracks. I cannot think now of any fuel or water stations on the joint tracks. I cannot give you now the location of the joint yard tracks operated by the Wheeling & Lake Erie. I will have to get that for you. I will also furnish the same information as to the joint road tracks.

[fol. 2131] (2113) The expenses of the joint yard tracks are distributed in my study under Item A-8, on the basis of the sum of my other accounts. And the road tracks are charged directly to road maintenance. That is, joint road track maintenance. I will furnish you with the total of the expenses of maintenance of joint track, both road and yard, debit and credit.

Referring to Block B, shops and engine house expenses, that is charged on the basis of Accounts 388 and 400. It is charged on the basis of locomotive repairs.

[fol. 2132] Testimony Taken at Columbus, Ohio, February 6, 1933.

Cross-examination of Mr. O. C. Larson.

By Mr. Orcutt:

(2117) At the time I gave my direct testimony in Washington I was in Pittsburgh as sales representative for the North American Coal Company. My position has always been secretary-treasurer and still is, and I have since been transferred back to Cleveland. (2118) I do not have charge of sales now.

Our organization is sales agent for the mines of the Pittsburgh Terminal Coal Corporation on the Pittsburgh & West Virginia Railroad. Also the Powhatan mine, Powhatan Mining Company. That is in Belmont County, Ohio, on the Pennsylvania Railroad, and is operated by the Powhatan Mining Company. We are also sales agent for the Red Parrott Coal Company on the C. & O. and West Virginia (2119), at Prenter, W. Va. It is in Boone County. We also represent Atwater & Company in the sale of their Pocahontas coal in the western territory. The president of our company is F. E. Taplin. The president of the Pittsburgh Terminal Coal Company is Samuel Pursglove. The president of the Red Parrott Mining Company is John A. Kelly. I don't know whether Mr. Taplin has a personal interest in the Pittsburgh Terminal Coal Company or not. [fol. 2133] (2120) The North American Coal Corporation has a very substantial interest. We own all the stock of the Powhatan and the Red Parrot Companies.

I believe the North American Coal Company owns a majority percentage of the stock of the Pittsburgh Ter-

minal Coal Company. Mr. Taplin owns the controlling interest in the North American Coal Company. I don't know whether he has any interest personally in the Pittsburgh & West Virginia Railway. He is chairman of the board. (2121) I believe he is president also.

By Mr. Younger:

I am asked whether in my direct testimony I said that the sales of low volatile smokeless coals in Cleveland had been steadily increasing. I don't believe I said that. I think during the last two years there has been a substantial decrease, by reason of the economic conditions.

I believe that the cheaper coals, the high volatile coals from Ohio and Pennsylvania, have moved into Cleveland more this year than they ever did for domestic use, and have supplanted and taken the markets that were (2122) formerly supplied by the low volatile coals.

I believe that was due to the low rates in effect from the Pittsburgh and No. 8 mines on the Pittsburgh & West Virginia in the last six months.

[fol. 2134] By Mr. Gutheim:

Since the rate reduction went into effect shortly after the first of October, the trend of the shipments from the P. & W. V. mines to northeastern Ohio has very materially increased.

I believe Mr. Taplin has been chairman of the board and president of the Pittsburgh & West Virginia Railway since 1923 or 1924. I don't know whether, since that period, the control has passed from where it was to the Pennroad Corporation.

I do not know anything of Mr. Taplin's interest today in the P. & W. V., nor of any individual interest on his part in the Pennroad Corporation. (2123) I don't know where the control of the Pennroad Corporation lies.

By Mr. Ballard:

I am asked over what period of time the replacement of southern low volatile coal by Ohio and Pennsylvania high volatile coal has taken place in Cleveland. There was some replaced I believe during the season of 1931-1932, and I think this last fall and winter, the present fall and winter

season, we have seen a greater interest than ever. There is more high volatile coal from Ohio and Pennsylvania being burned in and around Cleveland today than there ever was. The differential in retail price is probably $2.50.

The great bulk of the high volatile coal from Ohio and Pittsburgh, Pennsylvania, and sold in the Cleveland market, is sold for industrial rather than domestic purposes. [fol. 2135] This is mostly the smaller sizes.

(2124) The great bulk of the Pocahontas and New River low volatile coals are sold for domestic purposes in the Cleveland market.

By Mr. Orcutt:

So far as I know, Mr. Taplin, has no financial interest whatsoever in the Pittsburgh & West Virginia Railway.

R. M. Paisley was recalled as a witness and, having been previously sworn, testified as follows:

Direct examination.

By Mr. Bronson:

(2125) (Mr. Bronson stated that at the last hearing he had reserved the right to file an exhibit or exhibits showing the short tariff route distances from all mining points in the Pittsburgh, Ohio No. 8, and Cambridge districts. He stated that Mr. Paisley had prepared such exhibits, and they were offered in evidence.)

(Exhibits Nos. 355 and 356, Witness Paisley, received in evidence.)

The Witness: Taking exhibit 355 as an illustration, from the mines located in the Pittsburgh district on the Baltimore & Ohio Railroad we took the B. & O. circular NS100 dated January 3, 1933, and that circular shows the list of [fol. 2136] mines on the B. & O. in the Pittsburgh district. Then we took (2126) the tariff of the B. & O., that is, its I. C. C. No. 22070, and checked the routes from those mines to Cleveland. Then we used the B. & O. mileage tariff I. C. C. 2725 to determine the mileage over those routes.

[fol. 2137] In the case of the Pennsylvania Railroad, beginning on sheet 2 of this exhibit, and running through to sheet 8, there is no up-to-date list of coal mines that we could find, we having been in touch with the Pennsylvania Railroad's traffic Department at Pittsburgh to determine if there was such a list and being informed there was not. In this case we then took the tariff naming the rates and obtained from it all origin points at which there are collieries or mines. There is no issue on file with the Commission that would show the stations at which most of these mines and quarries are located. I should perhaps say all. The only issue we could obtain to show the location of these mines and quarries being Operating Department Circular called C. T. 1000. It shows sufficient mileages to enable you to spot, I might say, the mine at the nearest station from which mileage for distances are named in the distance table, filed with the Interstate Commerce Commission.

(2127) The authorities are shown following each block of distances and I believe this can be very easily checked. I have tried to show sufficient information so that it will be easy for anybody that wants to check it.

The routes under the first section of exhibit 355 were taken from 2725, and the distances are taken from I. C. C. 22070.

I have included in my statement both active and inactive mines. The mining point is the first column.

[fol. 2138] (2128) I don't know whether these mines are active or inactive except to the extent that I have been able to determine them from Mr. Kern's exhibit. Those that are marked with the percentage characterization are the mines that are supposed to be active, as shown by Mr. Kern's exhibits. In other words, I have calculated the mileage from the mileage tariffs on file with the Commission from the station nearest to the actual mine, in each case. The points I have used are all named as origin points in the rate tariffs. They may not be producing coal, they may have been abandoned, there is no way for me to determine that. The exhibit was made up with the very greatest possible care to get the mileages as exact as possible.

(2129) Referring to the column of distances headed "Distance from Mining Points," the distance shown is 202.7 miles, referring now to the very first mine. That is the distance from the station Edna. That is the name of

the nearest station at which Adamsburg mine is located.

(2130) The distance is from the station Edna and not from the mine Adamsburg. If the mining point was to indicate the mine, there would not be any necessity to show mining points—it would just show the mine. This is the only information that is on file with the Interstate Com-
[fol. 2139] merce Commission to show the distance from these mines.

(2131) Approximately the same explanation applies to exhibit 356 as I just gave for exhibit 355, but I want to call particular attention to the fact that on sheet 4 of this exhibit insofar as the mines located in the Ohio No. 8 district on the Wheeling and Lake Erie are concerned, it was impossible for me to ascertain, in the case of several mines there on the Wheeling and Lake Erie, taking for instance the Bellevue mine, just where that mine is located. Their mining circular or list of mines No. 162 shows the Bellevue mine as located on the Hurford branch. There isn't any Hurford branch in the Wheeling and Lake Erie System, Distance Tariff, so in that case I just adopted Witness Adell's distance shown in his exhibit No. 174. That is explained in the reference marked 1 in the brackets. The active mines as shown in Mr. Kern's exhibits are also prefixed with a percentage mark in this exhibit.

[fol. 2140] On the last page of each exhibit I have shown the average distances via short tariff routes from all mining points in each district.

Cross-examination.

By Mr. Orcutt:

(2133) I am asked whether the method I use for computation of distances in exhibit No. 355 is the method I think should be used by the Commission in determining the issues in this case. (2134) In my exhibit I have just shown the short tariff route, in all instances.

By the Examiner:

That is, from a station nearest to the mine. The purpose of the mileages was to show that there should not be any greater difference than 10 cents between the Ohio groups and the Pittsburgh group.

I am asked whether the method for computing distances was used by me in accordance with the formula prescribed by the Commission in its report on reconsideration in Docket 23922, which was issued January 24 and released February 2, 1933. No, it is not. It is in accordance with the mileage formula shown in Docket 23922 before January 24. To say that the purpose was to furnish the Commission accurate information, or as accurate information as possible, to develop the short tariff route distances from mining points, treating the nearest station as the mining point, from all mines in those districts so that they would have something to work on in (2135) the event they adopted the formula laid down in 23922 before it was changed, is exactly correct, and as I said before it shows that the dif-
[fol. 2141] ference in the rates from the two distances should not be any greater than 10 cents.

By Mr. Ballard:

In making my statement to Mr. Orcutt to the effect that I did not know whether the mines in these lists had been abandoned, I had particularly in mind the situation on the Pennsylvania Railroad, because there is no information of that kind that I could obtain, and I tried to get it from the Coal Traffic Department of the Pennsylvania at Pittsburgh, and they told me there wasn't any circular or tariff that would show that information. Of course, as far as Exhibit 356 is concerned, the fact that there is no modern or up to date list of mines on the (2136) Pennsylvania Railroad is true with respect to this exhibit. Now, in Exhibit 356 the list of mines are those shown in Agent Davis' Tariff I. C. C. 48, as I have shown on page 3 of the exhibit under the caption "Tariff Authorities." That is the current tariff, but I don't know whether all the points that are shown in that tariff have active mines located there. I don't mean active in the same sense that Mr. Kern has used it. I mean that they could ship coal if they had orders. That is, I don't know whether those are actual or potential shipping points.

I am asked whether, in these exhibits, I have eliminated short tariff routes which are unduly circuitous. They are the short tariff routes, and therefore I have not eliminated
[fol. 2142] any routes. The distinction I make is due to the

fact that (2137) in the case of all the railroads except the Pennsylvania, they have what might be termed current mine lists, while the Pennsylvania mine list is ten years old.

By Mr. Keeler:

If there is a joint mine served by two roads, there will be that duplication of routes in these exhibits. In that distance the short tariff route is the average including the particular duplication spoken of by Mr. Keeler. I don't think that figure would change the ultimate average a fraction of a mile unless there are a number of joint mines, and my understanding is there are only a few, very few, and it would not affect these figures practically any.

By the Examiner:

(2138) The distances shown are the individual distances from the particular mines over the short tariff routes, and if the mine is located on more than one line I show the individual distances over each of these routes and compute that in the final average.

By Mr. Webber:

In my exhibit 356 in some cases I have used the route through Justus, Ohio, and in other cases I have not. That is because of the fact that in the case of the St. Clairsville (2139) No. 8 district the route via B. & O. Justus, Ohio, and the Wheeling & Lake Erie is shorter than the B. & O. direct route, but in the case of the Wheeling Creek No. 8 district the route via the B. & O. through Warwick and Lester, Ohio, is the shortest route.

[fol. 2143] There is only one route out of the Cambridge district to Cleveland, Ohio, in so far as the B. & O. origins in that district are concerned, and that is via the B. & O. direct. I do not know whether all the shipments would move through Holloway, Ohio, or not. My understanding is that they come over through Bellaire, the route of the B. & O. is over through Bellaire, and then north to Cleveland.

By Mr. Ballard:

My attention is directed to the middle of sheet 2 of Exhibit 356, the first before "Tariff Authorities," "Route 1, Minerva, Ohio, N. Y. C. R. R." (2140) I believe that is an

error. I think it should read "via New York Central, Minerva, Ohio, and Wheeling & Lake Erie Railroad." I am not positive about whether these distances are via Minerva and the Wheeling. I would like to check my detail and let you know. I will let my answer stand via the Wheeling & Lake Erie, subject to correction.

By Mr. Webber:

In answer to the question that I was asked about the use of Justus, Ohio, as the junction point in that route, I said that that would make it shorter from St. Clairsville, but not from Wheeling Creek. That is right. (2141) It is suggested that if I use Justus in one instance I must use it in all, there could not be any difference in the mileages. There could, and due exactly to just what I said. The route from the St. Clairsville district, for instance, would read specifically via Warwick and Lester, and they do not read Warwick and Lester via Wheeling Creek. That would make the difference.

[fol. 2144] GEORGE DURHAM was recalled and, having been previously sworn, testified as follows:

Cross-examination (continued).

By Mr. Day:

(2143) I am reminded that at the last session I gave certain distances from mines on the Wheeling & Lake Erie to assembling points. I will file a statement showing the exact distance from the mines to all of the assembling points that were used in the cost study. I can file a separate statement showing those distances from potential as well as active mines. (2144) I might say; we had discovered that there were some quite apparent discrepancies and some matters in that connection which should be explained. The statement which I propose to file later will contain all that information, so that it will be easy to reconcile any apparent differences and discrepancies.

I am asked just how coal originated at Maher No. 6 and XL mine would be handled to Adena. It would be handled by mine crews. The work at the mines and the movement from the mines to Adena would be done by the same mine

crews that were considered in the cost study. That is the way the traffic is currently handled.

It is true that our cost study did not include coal originated at Maher No. 6 or XL mine, because those mines were not in operation at the period covered by our cost [fol. 2145] study. Maher No. 6 (2145) mine did not start operations until about the first of September, 1932.

By Mr. Hill:

I am asked whether, in the statement I now propose to furnish, there will be additional mines over which coal had possibly moved or may move at the rates we seek to have applied in addition to those mines for which we will show the assembling service. We will furnish first a statement showing the mines from which coal moved during the period of the cost study, and we will then furnish a supplemental statement showing the distance from all of the potential shipping mines to all of the assembling points.

By Mr. Day:

(2146) Generally speaking, the locomotives shown in the cost study are the ones used. There may be an occasional engine for some other purpose used in that territory. It is my understanding that those given in the cost study are the ones used generally and regularly in service. If I find that is not true, I will furnish you the additional information.

We do use locomotives of less than the 88,000 tractive power, on that track. They would be all 60,000-pound tractive power, practically, and an occasional helper engine with 43,000 pounds tractive power. On local runs, strictly local service, that is to say way freight switching service, we might use and frequently do use 43,000 tractive power [fol. 2146] locomotives. Those way freights occasionally haul some coal.

(2147) I am asked whether on our line from Brewster to Cleveland we would ordinarily employ three types of locomotives, the 88,000, the 60,000, and the 43,000. I would not say that that applies to the coal traffic as coal traffic. The use of the 43,000 tractive effort locomotive for the handling of coal is what may be termed incidental use. I do not think it is true that every way freight handles some coal. I think it is the exception rather than the rule where a way

freight train would handle coal, particularly from Brewster to Cleveland or from Brewster to, say, Mogadore, for the A. C. & Y.

[fol. 2147] I am requested to look at items B 4 and 5 on page 7 of our cost study, and to state how account 302 is separated as between shop machinery, locomotive shops and shop machinery, car shops. That machinery for car shops is all charged to car service expense. That will be found in column 11. Shop machinery, locomotive shops, is distributed on the (2148) basis of account 308. You will note that part of that charge is to locomotive expense and part of it to yard expense. The part which has been charged to yard expense is that proportion of account 308 charged to yard locomotives. With respect to item 6 (a) and 6 (b), account 308 is separated as between passenger and freight service on the basis of the accounting rules of the Interstate Commerce Commission. As between yard and road service that is separated with respect to the underlying data. We make the charge direct. Accounts 309 and 310 are separated on the same basis as the accounting shown in 308. The accounts I have described are on the basis I have used in form O. S. C. made to the Commission. Those forms not define the basis of separations. The 308 is separated with respect to the underlying data. We keep separate accounts for road and yard locomotives. (2149) Accounts 309 and 310 are separated on the basis of the charges [fol. 2148] to account 308. With respect to B-8, I am asked whether account 336, Maintenance of Joint Equipment at Terminals, debit and credit, includes car repairs. I will have to check that and let you know. I will have to check also whether account 336 was maintenance of joint yard locomotives.

My attention is directed to my statement on page 1014 of the record in connection with station expenses that "a study at Cleveland, Toledo and Canton showed that that 25.26 per cent of the total wages was chargeable to less than carload freight and that this percentage was used as the basis for distributing the aggregate amount of all undistributable station expenses for the entire line." I am asked whether in using that percentage figure we used the total wages paid at Cleveland, Toledo and Canton, including the wages of freight house employes engaged directly in handling l. c. l. freight. We used the total wages, yes. (2150) I am re-

minded that item C-4 we have excluded under the head of "Special Expenses" the sum of $5,765 which we allocated against less carload freight in connection with payment to weighing, inspection and demurrage bureaus. These bureaus supervise and check the weighing and inspection of less carload freight as well as carload freight. The work is performed in our freight houses, by the representatives [fol. 2149] of these bureaus. It is about the same general service that they render in connection with their total inspection. They would not have any occasion to perform any demurrage service, in connection with l. c. l., but they do as to weighing and inspection.

Item C-10 does not include any allowance of cost for the haulage of company coal. (2151) The only place in the study where it might be said that any cost was included for handling any company material, was in connection with the assembling service. We deducted the company's fuel from the total cars assembled before dividing the cost.

[fol. 2150] We do not take into consideration company materials in these trains, covered by our study.

I cannot state offhand what percentage of our total tonnage is non-revenue freight. I think we can get the figures.

I am asked why item C-16, drawbridge operation, is included in cost and charged to all yards when my testimony stated that drawbridges are located only at Cleveland. If that was my testimony, it is not correct, because we have a drawbridge at Toledo. Drawbridges are included (2152) in yards because all the drawbridges that operate are in yards, namely, Cleveland and Toledo.

It is true that Cleveland is the only point in our costs study at which drawbridges are located, but the basis of our yard costs is the years 1930 and 1931, and during those years we had charges, of course, to the drawbridge in Toledo as well as Cleveland. This particular item is charged to the yard service in order to obtain the engine-hour cost, and the cost of it is in the engine-hour cost for yard service. It is charged to all yards on our system, yes.

In connection with operation of coal and ore wharves, I am asked whether all the operating expense covered by contract is included in Item C-6. That is work which we perform or pay the contractor for performing (2153). It includes both—work we did with our own organization and the [fol. 2151] work we might have paid a contractor for doing.

The Wheeling & Lake Erie itself performs all of the service in connection with the coal and ore wharves except a small amount of maintenance which is performed by the operator of the dock. There are certain repairs made by the dock operator which the company pays for. That is a relatively small proportion of the expense, and that is the reason I said the $297,996 includes such sums, which are small, that we may have paid to the operator of the dock for work on our account.

I am asked what allowance, if any, is included in Item C-17 of expense for supervision of operation of coal and ore docks. The total undistributed amount, which has been distributed in accordance with previous charges to the various accounts, was $1,163,862. Of that superintendence amounted to $557,293. Now the proportion which went to special expenses, that is, Column 12, would be approximately 16 per cent of the $557,293 for superintendence. Loss and damage and personal injury expenses are included in C-17. (2154) Our contract with the dock operator does not take care of personal injuries that we may have in connection with our work on the docks. We have only taken in our study the amount that we paid for, and that is the basis of the apportionment, so that it seems a fair distribution of the undistributed expense. Our arrangement with the dock operator, does not provide for any reimbursement on account of any [fol. 2152] personal injuries or loss which we may have in connection with our own work on the dock or around the dock.

My attention is directed to Item C-8, Accounts 390 and 391, operating joint yards and terminals, where we show all in yard expenses, while Accounts 412 and 413, operating joint tracks and facilities under C-17 are distributed to yards as well as to other accounts. That seems to us to be (2155) a fair basis of distribution, and to make proper allocation of the charge, particularly since all of the expenses are included and will be absorbed some place. I can and I will furnish the detail of our expenses of Accounts 412 and 413 for the years 1930 and 1931.

Referring to page 9 of our Exhibit No. 146, the expenses carried in Column 1 and units carried in Column 3 do not include those used and developed on the Lorain and West Virginia. The gross ton miles shown in Column 3, page 9, include non-revenue freight.

Referring to Item B-5 where we use as a unit locomotive train-miles (2156), this does not include the movement be-

tween train yards and engine houses. That is a very simple item.

Item F in connection with the yard study at Brewster, the engine-hours in column 5 include time spent in handling empty cars. The expense, however, we always distribute on a loaded car basis. The figure of 8.6 cars per engine-hour [fol. 2153] includes only loaded cars. My answer as to Brewster applies to Cleveland, South Lorain, Huron, Canton, and Massillon. The basis of the car account as placed against the number of engine-hours was a single count in passing through the yard.

Item F, page 9, and the cost of 10.929 shown per switching engine-hour, which includes the cost of maintenance of way and structures, fully reflect the cost of yard expense.

(2157) Item G, where we use the unit "Car Days" and 15 days per car, this time includes time when these cars were in the hands of other roads for switch deliveries.

I am asked whether any foreign line cars or privately owned cars used in the transportation of this coal from Ohio No. 8 to Cleveland and to other destinations were covered by our cost study. During a part of the study, I think it was in 1930, there were a few cars of the Goodyear Tire & Rubber Company used. However, we treated this the same as if the cars had all belonged to the Wheeling & Lake Erie. My recollection is that this was only during a part of 1930. The Carnegie Steel Company has some cars; but as far as I know they are never used in road service. We have never used any.

(2158) We treated private cars entirely as if they were railroad's own cars. We had previously made calculations which showed, however, that by using the private line cars our cost would have been less than that charged for the use [fol. 2154] of our own cars. We have made no allowance in our study for per diem paid to other railroads for the use of their cars.

My attention is directed to page 990 of the record, where I described the study to determine the average number of days required for round trip movement of cars from Ohio No. 8 coal districts to Cleveland and return to the districts, and I am asked to state the time covered by this study. In the case of Cleveland we used cars in every month of both the years of 1930 and 1931. In the case of Akron we used cars moving in the months of January, June, July, August

and November, 1930, and February, June, July, August and December, 1931. These periods were used because (2159) they seemed to be more nearly representative of the actual conditions. In that connection I may say that we perhaps used more days under more normal conditions than would be required for the movement of cars for the reason that during that period cars were not particularly scarce and there was no special effort made to hurry them along. For instance, in the movement of cars between Cleveland and the mines, we had 89 cars that consumed from three to six days, 141 cars that consumed 7 days, 149 cars that consumed 8 days, 155 that consumed 9, 155 that consumed 10, 120 that consumed 11, 109 that consumed 12, and 184 that consumed from 13 to 33 days, so that I believe that might be said to be at least fairly representative.

[fol. 2155] The time covered by our study of the station agents' forces at Cleveland, Toledo and Canton, which we made for the purpose of arriving at the basis of distribution of expenses of station employes, were the month of September, 1930, and 1931, shown at page 1014 of the record.

I am asked whether during the period covered by page 1 of our Exhibit 146, our company handled any coal from Mingo Junction through Pine Valley to Cleveland and other destinations. I think not.

[fol. 2156] (2160) [Witness Durham stated for the record that when, in answering Mr. Day that morning, he said that Maher No. 6 started in the early part of September, 1932, he should have said Maher No. 9. That is now Purs glove No. 10 (2161), and is located approximately a mile north of Neff. It is about 18 miles from Adena.]

[Witness Durham also stated, at this point, that neither Maher No. 6 nor X-L Mine has shipped any coal since 1929.]

Redirect examination.

By Mr. Martin:

(2162) My statement at pages 2036 and 2037 of the record, that there are no mines located on our company's River Division, is correct. Since giving that testimony my attention has been called to Exhibits Nos. 246 and 337 in

this proceeding, which apparently indicate that mines are located on our company's River Division.

Those exhibits are similar to Exhibit No. 40 introduced by the carriers in Public Utility Commission of Ohio Docket No. 7252, purporting to show a list of mines in the No. 8 District which shipped coal during the period from January [fol. 2157] 1, 1929 to March 31, 1930. That exhibit erroneously showed three mines located at Terminal Junction, Ohio, on the lines of the Wheeling & Lake Erie Railway Company, namely, Shadyside, Ohio & West Virginia, and Philadelphia & Cleveland Coal Company's mines. None of these mines was located on the rails of the Wheeling during that period, or subsequently. I find that Shadyside Mine was included in Exhibit No. 40 for the reason that during January, 1930, four cars of coal were shipped from it for which the Wheeling originally had the billing. Later the billing was voided and we did not receive the (2163) road haul on the cars. The Traffic Department of the Wheeling was not advised of this change and reported to the Defense Committee in Docket 7252 Shadyside Mine as an active mine on the Wheeling & Lake Erie during the period January 1, 1929 to March 31, 1930.

As to the other two mines, namely, Ohio & West Virginia and Philadelphia & Cleveland, I find that in 1929 some coal was trucked to the Wheeling Terminal Railroad Peninsula team track from which it was billed by these companies and later was switched by the Wheeling Terminal to the Wheeling & Lake Erie Railway for road haul movement. No shipments have been made from these mines over the Wheeling & Lake Erie Railway since December 31, 1929.

[fol. 2158] There is not, and never has been, any track connection between the Wheeling & Lake Erie Railway and any one of those three mines.

I am referred to pages 2047 and 2049 of the record where I was asked some questions as to the differences in methods of calculating the average gross tons per train in our Exhibit 146 as compared with our Exhibit No. 40 in the Ex-River Case, I. & S. Docket 3619. I am asked to describe the methods employed in preparing those exhibits and the reasons for using different methods.

(2164) With reference to the present case which covers the cost of moving coal from the Ohio No. 8 District to the

various destinations named, the tonnage rating for the locomotives generally used in the coal service from Pine Valley to Brewster is 7,000 tons, and except for the stretch of track between Pine Valley and Rexford, where the tonnage rating from one locomotive is 3,500 tons. This situation admits of operating by starting from Pine Valley or any of the other assembling points in that vicinity with a train of 7,000 tons, using helper to Rexford and then moving train with one locomotive from Rexford to Brewster. Instead of doing that our present operation is to use a helper crew to move the 3,500 extra tons necessary to fill out from Rexford to Brewster from Pine Valley to Jewett, which is a few miles west of Rexford.

[fol. 2159] For clarity I might state it in another way: (2165) Instead of using a helper engine from Pine Valley to Rexford, which we might very well do, we use a puller crew ahead of the through train and move 3,500 tons from Pine Valley or other assembling points in that district to Jewett. The through train moving out of Pine Valley then picks up this extra tonnage at Jewett. Therefore, the service is equivalent to operating a train with a helper. This special condition did not exist in the case of the Ex-River movement where we were using regular trains to move the tonnage and it was necessary to supplement those regular trains to some extent with extra service between Pine Valley and Jewett. The situation did not admit of having a puller crew to match up with the regular trains. We therefore used the return mileage of the puller crew in the divisor in obtaining the train tonnage. I think that method of calculation undoubtedly overstated the cost of transporting ex-river coal, and it was only done because of the unusual situation in connection with that particular movement.

The cost of the train crew, of the puller in the present case, as well as the engine crew and all the other expense relating to that puller run, is all taken into account in the cost study.

[fol. 2160] (2166) At page 2072 of the record I was asked by Mr. Day to furnish copies of our working time table showing engine ratings for our entire line. I have furnished him such copies. I think that time table supplies all of the information requested by him at page 2069. It furnishes all of the information with the exception of the series number of the locomotives used for the transportation of

coal between Brewster and Cleveland. The series numbers and the tractive power of those locomotives are: 6051 to 6070, inclusive, with a tractive power of 60,484 pounds; 8001 to 8010, inclusive, with a tractive power of 80,300 pounds; 8401 to 8420, inclusive, with a tractive power of 88,382 pounds.

In my answer of this morning I referred to the 60,000 pounds and the 88,000 pounds locomotives. I should have included the 80,000 tractive power. My answers of this morning on the same subject (2167) should include the 80,300 pounds locomotive, together with the other two.

I do not think the 43,000 type should be included here. I think that is incidental use. As to these 43,000, I don't remember the exact tractive power—43 pounds, approximately. I will furnish the information.

At page 2074, Mr. Day asked me to supply the engine ratings on the Sherrodsville Branch. These engine ratings [fol. 2161] are as follows:

Locomotive No.	Tonnage rating west bound
3552-3563	1060
3574-3575	1140
4101-4156	1320

(2168) I don't have the tractive power of those engines here. I will give it to you. These ratings apply over the entire branch. They are the west bound ratings.

Referring to pages 2079 to 2085 of the record as to the mines on the Adena Branch extending from Adena to Neff, I am asked to re-state the names of the mines on that branch which produced coal during the period of our cost study and the distances from the assembling point at Adena. Stellar Mine, distance from Adena, 1.7 miles; Somers No. 6, distance from Adena, 2 miles; Bidwell, distance from Adena, 8.1 miles; Locust Point, distance from Adena, 10.1 miles; Clarkson, distance from Adena, 12 miles.

(2169) At page 2082 I testified that only 25 per cent of the total coal originated by the Wheeling in the Ohio No. 8 district was assembled at Pine Valley. The 25 per cent which was assembled at Pine Valley originated at Dorothy Mine and Nicholson Mine, which are east of Pine Valley; at Dillon No. 1 Mine and Bainbridge No. 2 Mine, which are [fol. 2162] west of Pine Valley. Only 6.76 per cent of the

total number of loaded cars of coal originated in the Ohio No. 8 district during the period covered by the study originated east of Pine Valley.

At page 2086 I was asked to furnish information as to the proportion of the coal originated by the Wheeling, in the Ohio No. 8 district which originated on the branch from Neff to Adena during the period covered by the study. (2170) This is 14.48 per cent. For mines on the lines of the Wheeling from Pine Valley to Kenwood, it is 3.10 (*sic.*) per cent. A part of this coal originated at Bainbridge Mine and Dillon No. 1 Mine and was assembled at Pine Valley. That is, a part of this 33.10 per cent.

The percentage for the mines on the Adena, Cadiz and New Athens Branch is 13.41 per cent. For the mines on the Wheeling west of Kenwood, the percentage is 32.25. The five percentage figures which I have given make a total of 100 per cent.

In order to summarize the information which I have given as to the distances of the mines from their various assembling points, etc., I am asked to file a statement. (2171) I now desire to offer such a statement as Exhibit No. 357.

(Exhibit No. 357, Witness Durham, received in evidence.)

[fol. 2163] The Witness: In the first column of this exhibit I have shown the mines at which coal was produced during the period of the cost study. In the fourth column I have shown the assembling points for each of these mines. In the fifth column is shown the number of cars loaded by each of these mines during the months of January and July, 1930 and 1931. In the sixth column is shown the distances from the assembling points and in the last column is shown the total number of car miles involved in moving these loaded cars from the mines to the assembling points.

The exhibit shows that the average assembling distance per car is 4.5 miles, as I stated in my direct testimony. This statement is substantially the same as the statement furnished Mr. M. Carter Hall on January 6, except that for convenience I have also shown in Column 2 the mines which are listed on Supplement No. 1 to List of Coal Mines and Operators No. 16, issued by our company as of April 20, 1932, and used by Mr. Adell in his Exhibit No. 164, and in Column 3 I have shown the mines in the No. 8 district

which were active during the period from July 1, 1931, to September 15, 1932, which were used (2172) in Mr. Adell's Exhibit No. 166. The notes appearing at the foot of the exhibit explain any apparent discrepancies between the three lists of mines shown in the first three columns of the exhibit.

At pages 2087 and 2088 I was asked to furnish a statement of the trains operated between Pine Valley and Brew- [fol. 2164] ster during January and July of 1930 and 1931, which handled coal but were not included in our cost study. I have had the records checked and find that during these four months there were 162 fast or time freight trains operated from Mingo Junction or Martins Ferry through Pine Valley to Brewster which handled some coal, and that during the same period there were 39 locals or way freight trains, and 29 extra trains operated from Pine (2173) Valley to Prewster which handled some coal.

I am asked what the effect would have been if we had included those 29 extra trains from Pine Valley to Brewster which handled some coal. If we had included the 29 extra trains it would have made no difference as to the train loadings to Cleveland and Huron. It would have made a difference of one car to Canton, Massillon, Akron and South Lorain. As to the cost it would have made a difference of 1 mill to Canton, Massillon and Akron and 3 mills to South Lorain. That is it would have increased the cost 3 mills to South Lorain, 1 mill to Canton and Massillon, and 1 mill to Akron. That is accounted for by the fact that the items of expense in connection with the movement of this coal which are affected by the loading, that is, a greater or less loading, [fol. 2165] are train dispatching, wages of trainmen and enginemen, locomotive costs and proportionate increase in overhead items. That amounts to about 16 per cent of the total cost. The other items of expense, such as a maintenance of way and structure which are on the road ton mile basis, train supplies and expenses, which are on a car mile basis, fuel and water, which is on a gross ton mile basis, assembling, which is on a per car basis, station expense, which is on a per car basis, yard expense, which is on a per car basis, car expense which is on a day (2174) basis and a mile basis and empty haul, which is on a 100 car train basis would not be affected by a change in loading.

At page 2097 I was asked to furnish the tonnage rating of the Pittsburgh & West Virginia locomotives between Pittsburgh Junction and Brewster. They are as follows:

Locomotive Nos.	Tonnage rating
900 and 901	3350
910 and 914	3926
911, 912 & 913	3618
917 to 928, inc.	3926
1000, 1001, 1002	4355

It will be noted that the ratings which I have given here are slightly different from the ratings shown in our time table, particularly with respect to engines 910 to (2175) [fol. 2166] 918. The differences are accounted for by the fact that by reason of increase in steam pressure the tonnage ratings of Locomotives Nos. 910 to 918 have been increased.

At pages 2098-2100 I was asked to furnish some other information. The information requested is as follows:

Month	Year	Number Cars of Coal Received at Brewster	Cars of Coal Received at Pittsburgh Junction	Total
January	1930	690	414	1104
July	1930	1201	1255	2456
January	1931	583	153	736
July	1931	1317	919	2236
Total		3791	2741	6532

I was asked, at page 2099 of the record, to furnish information as to how much of the Pittsburgh & West Virginia interchange coal was included in the trains covered by Pages 1 to 6 of our Exhibit No. 146. I find that during the four months covered by the study (2176), the 162 trains used in the study handled 664 cars of coal from the Pittsburgh & West Virginia, or an average of 4.1 cars per train.

At page 2108, Mr. Day asked me whether passenger service was charged with any of the time of locomotives which [fol. 2167] are engaged jointly in performing freight and passenger service. I have checked this matter and find that during the years 1930 and 1931 there was approximately two and one half hours switching service per day charged against passenger service, the distribution being on the basis of time consumed. This represents less than

one half of 1 per cent of the total switching locomotive miles. As I have heretofore testified, we have charged against this coal traffic its proportion of the deficit from passenger service.

[fol. 2168] On page 2108 Mr. Day asks me how we distributed, as between freight and passenger service, maintenance of stations and office buildings shown as Item A-3, on page 7 of our exhibit No. 146. I replied that it is all charged to freight service. (2177) My answer was incorrect. I find that during the two year period the total amount expended for maintenance of stations and office buildings was $62,192, of which $6,582 was distributed to passenger service in accordance with instructions of the Interstate Commerce Commission. The remaining $55,340 has, in the cost study, been charged entirely to carload freight, no portion being charged to l. c. l. freight.

At page 2111 I stated that a small proportion of a charge of $14,581 for maintenance of signals and interlockers included in the item of $645,705—"other expenses," shown against Item A-8 on Page 7, would be distributed to coal and ore wharves, but that it would be insignificant. I find that the proportion of the $14,581 distributed on a percentage basis to special expenses would be $3,807. I have had a further calculation made to show the effect of this amount upon the cost per ton of transporting coal to Cleveland. It shows that the cost was thereby understated 19/1000 cents per ton.

(2178) It is possible that there may be other expenses distributed through the item of $645,705 where coal and ore [fol. 2169] wharves would be undercharged. That may be shown by one illustration. There is included in the $645,705 charges to Account 275—"Insurance," the total amount of which, for the two year period, was $26,615, of which $6,949 would be distributed on a percentage basis to coal and ore wharves. The premium paid on tornado and fire insurance on the docks property at Huron for the two years amounted to $11,862, so that in that instance an actual under-charge to coal and ore wharves of $4,913 resulted. As a result, the cost of transporting coal to Cleveland was thereby overstated twenty-four one-thousandths (24/1000) cents per ton.

It is because of the very small effect which these items have upon the ultimate cost per ton of transporting coal that I consider them as insignificant.

I would like to state generally that the particular method used in assigning overhead or undistributed items of expense to the cost of transporting coal can have (2179) but very little effect upon the final cost per ton. In Exhibit 44 in I. & S. Docket No. 3619 all overhead and supervisory expenses in connection with maintenance of way and structures, maintenance of equipment, and conducting transportation were included with traffic and general expenses and distributed on a general percentage basis. That basis of assignment was criticised by a witness for the protestants upon the theory that such expenses should be added to charges of each general group. To obviate that criticism [fol. 2170] in this case we have added these overhead and supervisory expenses to the charges of each general group in our cost study in this case. After the study had been completed, a re-calculation was made to determine the actual effect of the different method of distribution upon the cost per ton of transporting coal. It was found that by using the method of distribution employed in Exhibit No. 44 in I. & S. Docket No. 3619, the cost to Cleveland would have been 80.19 cents per ton as compared with the cost of 80.13 cents as shown by the present study, or a difference of only six one-hundredths (6 100) of a cent. I think this fully justifies the conclusion that the method of distributing overhead costs can have no substantial effect upon the cost per ton of transporting coal, particularly when all items of overhead cost are included.

At pages 2112 and 2113 I was asked (2180) to furnish Mr. Day with a statement of the expenses of maintaining joint tracks—road and yard—both credit and debit. I now hand Mr. Day two copies of two statements containing an analysis of Accounts 278 and 279, by facilities, for the two year period January 1, 1930 to December 31, 1931, which provides him with the information he requested.

My attention is directed to pages 2112 and 2113 of the record where I testified that the expense of maintaining joint road tracks is distributed under Item A 8 of Page 7 of [fol. 2171] our Exhibit No. 146, and the expense of maintenance of joint road tracks is charged directly to road maintenance. I now wish to correct that statement. I find

that the charges for the joint use of both road and yard tracks have been included with the undistributed items and pro-rated on the basis of previous charges.

I am told that some confusion exists in the record at pages 2113 and 2114 with respect to the expense of maintaining shops and engine houses and charges to engine house expenses. I stated at Page 1011 of the record that the charges to Account 235 covering the costs of maintaining shops and engine houses (2181) had been separated by reference to the underlying details as between locomotive shops, car shops and engine houses. Engine house expense which comes in Block C—"Transportation"—are distributed as between road service and yard service on the basis of engines dispatched.

Charges for the maintenance of locomotive shops are then distributed as between road service and yard service on the basis of locomotive repairs.

The maintenance of car shops is assigned entirely to car service expenses.

The charges for maintenance of engine houses have been distributed on the basis of the charges to Accounts 388 and 400.

[fol. 2172] Referring to my cross examination of this morning, I am asked to state whether or not foreign cars are used to any extent in the handling of coal originated on the Wheeling & Lake Erie Railway. They are used to a very limited extent insofar as the movement of coal to any of these destinations involved in these proceedings are concerned. We have in the past used some cars of the Newburg & South Shore for the coal consigned to the American Steel & Wire Company. Of course it does happen that occasionally we furnish coal for other railroads in their cars, but very little of it moves to the destination we are here considering.

(2182) I stated this morning that no amounts for per diem were paid to other railroads on any foreign cars which might have been used in the transportation of coal. If we were to include an item for per diem, that would require the elimination from our cost study of some items of expense on account of car service, and thereby reduce the item of 48 cents per day of constant charge against the company cars used in the transportation of this coal plus, of course, the 100-mile line haul charge. In addition to that, if we

were handling foreign cars they would be given more expeditious movement in all cases than is represented by the time estimated in this study. In other words, the inclusion of a dollar for per diem charge on a foreign car would be largely offset by the elimination of a 48-cent constant charge on a company car and the charge of $100.00 for each 100 miles that that car moved in this service.

[fol. 2173] Concerning the allocation to l. c. l. freight of wages of station employes (2183), the study includes the total wages of station employes. The wages paid warehousemen have been assigned directly to l. c. l. freight, and wages paid weighmasters have been assigned directly to carload freight. The 25.26 of the undistributed balance was assigned to l. c. l. freight.

I stated that Columns 1 and 3 on Page 9 of our exhibit did not include any of the service units of the Lorain & West Virginia Railway Company. Were they included, I don't believe it would affect the cost study one way or the other materially. This opinion is based on the fact that the Lorain & West Virginia is operated by the same set of officials that operate the Wheeling & Lake Erie, and the same standards of maintenance are observed on that line as on the Wheeling & Lake Erie. In all cases it is operated in road service by the Wheeling & Lake Erie road locomotives. They go through South Lorain without any change at the point where they pass on to the Lorain & West Virginia. (2184) The Lorain & West Virginia has but one locomotive of its own, a yard locomotive, the same size as the Wheeling & Lake Erie yard locomotive. It has no cars of its own.

(At this point Mr. Day withdrew his request for information which was to have been compiled by the Wheeling & Lake Erie covering the analysis of Accounts 412 and 413, inasmuch as Mr. Martin stated that its separation would be such a big task.)

[fol. 2174] Recross-examination.

By Mr. Day:

(2186) My attention is called to the fact that I referred to the 39 way freights and 29 extras in addition to the 162 trains from Pine Valley to Brewster covered by our study. I said that the inclusion of the 29 extras would have made

no appreciable difference in the result of our study. That is correct. I do not have here the number of cars of coal carried in those 29 extras. I can give you the ton miles produced by them. The figure is 6,463,711 gross ton miles.

The 39 way freights are the ordinary local pickup switching at stations and is not an essential part of the coal transportation service. (2187) It is true they occasionally handle some coal, but it is incidental to their other service and I don't consider it would be proper to include it.

In connection with the tonnage received from the P. & W. V. at Pittsburgh Junction and Brewster, it is not true that the figures I gave covered only the cars that were hauled in our 162 study trains. That is all the coal. I stated that those 162 trains handled 664 cars, or an average of 4.1 cars per train. This movement between those two points does not enter into the cost study except as it made tonnage, except to the extent that the average of four cars might have shown the amount of tonnage handled by those [fol. 2175] trains. The average of four cars was included in the trains, so that the tonnage they produced or gross ton miles would be in the total gross ton miles.

(2188) I do not include any of the P. & W. V. trains which went through from the Pittsburgh & West Virginia to Brewster. I was only referring to cars which these through trains picked up, either at Pittsburgh Junction or at Jewett an average of .41 cars per train were handled by these trains which we considered.

If we had paid mileage allowance to private car owners, such as the Goodyear Tire & Rubber Company, of course we would not have had a Wheeling & Lake Erie car in place of that and we would of course have deducted or been entitled to deduct that cost if it were included, and as I said this morning on one occasion we calculated the cost of what we would have pay for the use of the privately owned cars as compared with the cost of using our own cars and found out that we could use it cheaper than we could our own.

(2189) I don't know how many of these private cars entered into our cost study. I don't know whether there were any of them entered into it. I happen to know there were a few of the Goodyear cars used in the transportation of coal during the year 1930, as I recall it. Of course to the extent that we used them we would have reduced our cost.

[fol. 2176] Redirect examination.

By Mr. Martin:

If we had included them in the cost study as privately owned cars, we would have reduced our cost. But we treated all of the cars in the study as Wheeling & Lake Erie owned cars, and charged against them the full constant costs and full mileage costs of maintaining and operating the Wheeling & Lake Erie car.

[fol. 2177] J. W. Herrold was called as a witness and, having been duly sworn, testified as follows:

Direct examination.

(2190) My name is J. W. Herrold, Superintendent of the Rate Department, Public Utilities Commission of Ohio. I am employed in that position and have been for the past twelve years. At the hearing in Columbus on December 20, 1932, our assistant secretary, Mr. David Archer, offered in evidence our Exhibit No. 129, which is a copy of the record before our Commission in the Republic Steel Corporation vs. The B. & O. Railroad, et al, Docket 7252. At that time it was understood that we would also introduce in evidence the records made before our Commission in Docket 8072, involving the rates on coal from the Cambridge, Crooksville & Hocking districts to destinations in northeastern Ohio, and Docket 8097, involving the rates from mines on the New York Central Railroad to points of destination in northeastern Ohio, and also Docket 7036, Empire Steel Corporation vs. B. & O. Railroad Company, involving rates from the Cambridge district to Mansfield, Ohio. I now have each of these records and desire to offer them in evidence.

Docket 8097 was from the Pomeroy district.

(2191) I might say that all of these records are certified by our Superintendent of Investigation. Docket 7036 will be offered in evidence as our Exhibit 129-A, Docket 8072 as our Exhibit 129-B, and Docket 8097 as our Exhibit No. 129-C.

(Exhibits Nos. 129, 129-A, 129-B and 129-C, Witness Herrold, received in evidence.)

[fol. 2178] Testimony Taken at Columbus, O., February 7, 1933

C. B. Ackerman was recalled and, having been previously sworn, testified as follows:

Redirect examination.

By Mr. Ballard:

(2206-j) In 1895, I first went to work for the Chicago & Northwestern Railroad at 16th Street, Chicago. In 1896, I was a freight trucker; in 1897, a freight checker; in 1898, a tonnage clerk, all at the Northwestern Railroad, Chicago, 16th Street Station.

In 1898, I was freight trucker and bill clerk for the C. & E. I. Railroad at Chicago. In 1898, C. & E. I. Railroad, Chicago, (2207) yard clerk; 1898-1901, Chicago & Northwestern, Wood Street Station, bill clerk; 1902, Chicago & Northwestern, Wood Street and 16th Street, Chicago, bill clerk; 1902, Chicago & Northwestern, Wood Street and 16th Street, Chicago, bill clerk.

In 1903-1904, C., M. & St. P., Western Avenue, Chicago, bill clerk and rate clerk.

In 1905-1906, Southern Pacific Railway, Los Angeles, California, bill clerk, rate clerk, accountant, yard clerk, chief yard clerk.

In 1906, Chicago & Northwestern, Wood Street, Chicago, bill clerk; 1906-1912, Chicago & Northwestern, 40th Street Chicago, bill clerk, chief rate clerk, accountant; in 1912-1918, Chicago & Northwestern, general office, Chicago, rate clerk, assistant to assistant general freight agent, assistant [fol. 2179] to assistant freight traffic manager, assistant to freight traffic manager.

In 1918-1920, United States Railroad Administration, Chicago, assistant to assistant freight traffic manager, Chicago & Northwestern, and assistant to Chairman, Western District Freight Traffic Committee.

In 1920-1924, United States Railroad Administration, Washington, D. C., traffic assistant to the Director General.

Q. Please describe in detail the field investigations (2208) which you made in connection with this case and in connection with preceding cases in this territory and in connection with cases in Indiana-Illinois territory and gen-

erally in connection with other cases and describe the manner in which the data used by you in your locomotive performance evidence in this case was brought up to date for the purposes of this case.

A. I was engaged by the Eastern Ohio Coal Operators' Association to make a preliminary transportation study of the southern fields and Ohio fields in connection with lake cargo traffic, in July, 1929. I started my investigation on September 13, 1929, at Ashland, Kentucky, on the C. & O. Railroad, and completed this investigation on September 28, 1929, at Columbus, Ohio. During the investigation I visited Ashland, Russell, Paintsville, Martin, Wheelwright, [fol. 2180] Shelby Junction, Pikeville and Elkhorn City, Kentucky, on the C. & O. Railroad. These points were visited by automobile, except that I went by train from Martin to Wheelwright and from Pikeville to Elkhorn City in order to observe the nature of the terrain over which that road ran, the track layouts and location of yards, mines, curves, grades, cuts, fills, bridges and trestles.

I next visited Logan, West Virginia, at which point I traveled by automobile alongside of the right of way on the various branches serving the Logan District. From (2209) the Logan fields I crossed the Blair Mountain, at Blair, West Virginia, into the Coal River fields and picked up the C. & O. Railroad and followed it from Sovereign into Danville Yard at Madison, West Virginia, alongside of the Spruce Fork Division. I followed the C. & O. thence up Pond Fork Branch to the end. I next visited Sproul, West Virginia, and from that point went to Elk Run Junction, West Virginia.

I next visited the Kanawha fields, stopping at Cabin Creek, Cane Fork and Handley, West Virginia. From Handley I visited the Gauley and New River fields, stopping at Gauley, Thurmond, and Raleigh, West Virginia.

Returning, I stopped at Huntington, thence crossed into Ohio from Ashland, Kentucky, visiting Jackson, Logan, Nelsonville, Pomeroy and Columbus, Ohio.

[fol. 2181] At all points I visited I called at the railroad yard and roundhouses as well as interviewed employes of the railroad, such as yard masters, yard clerks, freight agents, car distributors, train crew employes, roundhouse foremen, section men, and any one else who had any knowledge of the railroads.

I was employed by the Ohio Lake Cargo Coal Rate Committee to make a further investigation of the Ohio, West Virginia, Southern and Pennsylvania fields, in April, 1930. I commenced this investigation on May 6, 1930, and concluded it on June 26, 1930. In this investigation I visited the Hocking Valley yard and dock at Walbridge, Ohio; the T. & O. C. yard and dock at Walbridge; the B. & O. yard and dock at Toledo; the W. & L. E. yard and dock at Ironville; the P. R. R. yard and dock at Sandusky, the W. & L. E. yard and dock at Huron; the B. & O. yard and dock at Lorain; the P. R. R. yard at Columbus; the N. & W. yard at Columbus; the T. & O. C. yard at Columbus; the Parsons yard of the C. & O. at Columbus; the McKees Rock, Pennsylvania yard of the P. & L. E. and P. C. & Y.; the Scott Haven yard of the P. & L. E.; the Jacobs Creek yard of the P. & L. E.; the Star Junction yard of the P. & L. E.; the Monessen, Pennsylvania yard of the P. & L. E.; the Montour Railroad yard at Mifflin, Pennsylvania; the Shire Oak, Pennsylvania yard of the P. R. R.; the West Brownsville, Pennsylvania yard of the P. R. R.; the Brownsville, Pennsylvania, yard of the Monongahela Railroad; the Pitcairn, Pennsylvania yard of the P. R. R.; the Scully, Pennsylvania yard of the P. R. R.; the Coropolis, Pennsylvania yard of the Montour Railroad; the Connellsville, Pennsylvania yard of the B. & O.; the Youngstown, [fol. 2182] Ohio yards of the P. & L. E., N. Y. C., P. R. R., B. & O., and Erie Railroads; the Conneaut, Ohio yard and dock of the B. & L. E.; the Ashtabula, Ohio yards and docks of the N. Y. C. and P. R. R.; the Fairport Harbor yard and dock of the B. & O.; the Portsmouth, Ohio yard of the N. & W.; the B. & O. yard at Columbus; the Portsmouth, Ohio yard of the B. & O.; the Cincinnati yard of the P. R. R.; (2210) the Jackson, Ohio yard of the B. & O.; the Athens, Ohio yard of the B. & O.; the Athens, Ohio yard of the N. Y. C.; the Crooksville, Ohio yard of the P. R. R.; the Faultonham, Ohio yard of the N. Y. C.; the Newark, Ohio yard of the B. & O.; the Cambridge, Ohio yard of the P. R. R.; the Benwood, West Virginia yards of the P. R. R. and B. & O.; the Wheeling yard of the B. & O.; the Dillonvale, Ohio yards of the W. & L. E. and N. Y. C.; the Charleston, West Virginia yard of the N. Y. C.; the Dickinson, West Virginia yard of the N. Y. C.; the Peach Creek, West Virginia yard at Logan, West Virginia of the C. & O.; the

Williamson, West Virginia yard of the N. & W.; the Iaeger and Bluefield, West Virginia yards of the N. & W.; the DeCoursey, Ohio yard of the L. & N.; the Covington, Kentucky yard of the C. & O.; the Stevens yard of the C. & O. at Cincinnati; the Undercliff yard of the P. R. R. at Cincinnati; the Clare yard of the N. & W. at Cincinnati; the Ivorydale, Ohio yard of the B. & O.; the Sharonville, Ohio yard of the Big Four-N. Y. C.; the Ludlow, Kentucky yard at Cincinnati of the Southern Railroad; the McLean yard of the Southern Railroad; the North Hazard, Kentucky [fol. 2183] yard of the L. & N.; the Jenkins, Kentucky yard of the C. & O.; the Norton, Virginia joint yard of the N. & W. and L. & N.; the Loyall, Kentucky yard of the L. & N.; the Corbin, Kentucky yard of the L. & N.; the Stearns, Kentucky yard of the Southern Railway; the Bluefield, West Virginia yard of the N. & W.; the Raleigh, West (2211) Virginia yard of the C. & O.; the Gauley, West Virginia yard of the C. & O.; the Smithers, West Virginia yard of the N. Y. C.; the Handley, West Virginia yard of the C. & O.; the Russell, Kentucky yard of the C. & O.; the Logan, Ohio yard of the C. & O.; the Gest yard at Bellefontaine, Ohio, of the N. Y. C.; the Toledo, Ohio yard of the N. Y. C.

I next conducted an investigation in Ohio during the period September 29, 1932, to October 6, 1932, visiting the yards of the N. Y. C. and Nickel Plate at Toledo; the Fostoria, Ohio yard of the N. Y. C. & St. L.; the Gest yard, Bellefontaine, Ohio, of the Big Four; the N. Y. C. yard at Columbus; the Parsons yard at Columbus of the C. & O.; the Newark, Ohio yard of the P. R. R.; the Mt. Vernon, Ohio yard of the P. R. R.; the Zanesville, Ohio yards of the N. Y. C. and W. & L. E.; the Dover, Ohio yard of the B. & O.; the Cambridge, Ohio yard of the P. R. R.; the Canton, Ohio yard of the P. R. R.; the Alliance, Ohio yard of the P. R. R.; the Ravenna, Ohio yard of the Erie Railway; the Kent, Ohio yard of the Erie Railway; the Crestline, Ohio yard and Tower yard of the P. R. R. and N. Y. C.

[fol. 2184] At all of these places I visited the round houses, if there were any there, as well as the yards, and observed the track layout and method of handling traffic. At places where there were nearby mines I observed their location and track layout. At all the places I visited I in-

terviewed the local railroad employes including (2212) yard-masters, yard clerks, freight agents, car distributors, train crew employes, roundhouse foremen, section foremen, and any one else who had any information about railroad operation.

My investigation in the Illinois, Indiana and Kentucky fields started the middle of August, 1928, and continued intermittently to December 8, 1928. I again conducted an investigation of Illinois, Indiana and west Kentucky starting on April 1, 1929, and continuing intermittently to September 2, 1929.

[fol. 2185] During these investigations I investigated the conditions at the following points: C. & E. I. Railroad from Danville, Illinois, to Evansville, Indiana, including yards and roundhouses at Danville, Illinois, and at Jackson (2213), Seifert, and Evansville, Indiana, and intermediate points of importance; the Southern Railway at Boonville, Huntington, Winslow and Enos, Indiana, and points between Evansville and Enos, Indiana; the Big Four and Illinois Central yards at Evansville; the Henderson, Kentucky yard and bridge of the L. & N.; Joly, Kentucky, and Clay, Kentucky, on the Illinois Central; Clay, Kentucky, on the L. & N.; Wheateraft, Princeton, Dawson Springs, Charleston, Crabtree, Hamby Station, and Madisonville, Kentucky, on the Illinois Central; Madisonville and Earlington, Kentucky, on the L. & N. At all of these places in Kentucky, I visited the yards, roundhouses and mines served by the railroads. I visited Metropolis, Illinois, and the yards adjacent thereto and the bridge owned and operated jointly by the C., B. & Q., Illinois Central and N. C. & St. L. Railroads. I visited Clinton, DuQuoin and Tamoroa, Illinois, on the Illinois Central—those are all in Illinois the Centralia yards of the C., B. & Q. and Illinois Central; the Brewer yard of the C. & E. I.; the Tilton yard of the Wabash Railroad at Danville; the Lyons yard of the Big [fol. 2186] Four Railroad at Danville; the Newport, Indiana mine on the C. & E. I.; the Clinton, Indiana yard of the C. & E. I.; the Terre Haute, Indiana yard of the E. I. & T. H. and C., M. & St. P.; the Washington, Indiana yard of the E. I. & T. H.; the West Clifton and Latta, Indiana yards of the C., M. & St. P. & P.; the Midland and Victoria, Indiana yards of (2214) the C. I. & L. Railway; the Seifert, Indiana yard of the C. & E. I.; the Mt. Carmel, Illinois

yard of the Big Four; the Harrisburg, Illinois yard of the Big Four; the Wenona, Illinois yards of the Illinois Central and C. & A.; the Decatur, Illinois yards of the Illinois Central and P. R. R.; the Pana, Illinois yards and mines of the Illinois Central; Big Four, B. & O. and C. & E. I.; the Taylorville and Auburn yards and mines of the C. I. & M. and Wabash; the Virden, Illinois mines and yards of the C., B. & Q. and C. & N. W.; the Girard, Illinois yards of the C., B. & Q. and C. & N. O.; the Nilwood yard of the C. & A.; the Carlinsville, Illinois yard of the C. & A.; the Green Ridge, Illinois yard of the C. & N. W.; the Staunton and Mt. Olive, Illinois yards of the Wabash; the Edwardsville, Illinois yard of the Illinois Traction System and the Litchfield & Madison; the Bois, Tamaroa, Elkville, Sunfield, DuQuoin, Pinckneyville and Murphysboro, Illinois yards of the Illinois Central; the Marion, Illinois yards of the C. & E I. and Missouri Pacific; the Johnson City, Illinois yard of the C. & E. I.; the West Frankfort yards of the [fol. 2187] C., B. & Q. and C. & E. I.; the Benton, Illinois yard of the Illinois Central; the Herrin, Illinois yards of the C., B. & Q. and Illinois Central; the Bush, Illinois yard of the Missouri Pacific; the Zeigler, Christopher, Sesser and Centralia yards of the C., B. & Q.; the Centralia and Sandoval yards of the Illinois Central; the Lincoln yards of the Illinois Central and C. & A.; the Springfield, Illinois yards of the Wabash, C., S. & St. L., B. & O., and C. & A.; and the Andrews, Illinois yard of the C. & I. M. Railroad.

In the investigations in Illinois on this trip I visited the mine yards, roundhouses and other railroad facilities and talked to the local employes as in the other investigations.

That completes the description of my field studies of the questions I have testified about in this case. In addition to those field studies I made a field study in 1930 of southern Wisconsin and northern and central Illinois, in which I visited Kenosha, Janesville, Beloit, Rockford, Forreston, Ottawa, Chillicothe, and points south as far as Centralia, Illinois, and thence back to Chicago. This was in connection with sand and gravel rates.

In 1928 I made a field investigation of conditions covering northern Mississippi, eastern Arkansas, and southeastern Missouri. Later I made another field investigation in the south covering Tennessee, Mississippi, Alabama,

Georgia, and Louisiana. These two last mentioned investigations were also in connection with sand and gravel rates.

[fol. 2188] The later investigations that I have just spoken of, I made in the south, covering Tennessee, Mississippi, (2216) Alabama, Georgia, and Louisiana. I think it was in the following year. I don't believe it was later than 1929.

I made an investigation in the Eastbound Bituminous Coal case within the last year or two. That was during the summer of 1930 for the Central Pennsylvania Coal Traffic Bureau. I investigated the situation from the Meyersdale, Clearfield, Piedmont fields from the north, and Pocahontas and New River for the fields from the south, for the Tidewater, starting at Hampton Roads and covering all the ports at which coal is unloaded north to and including Jersey City and points intermediate. I also investigated all the intermediate yards in that territory on that trip. It was a locomotive performance investigation.

During my connection with the Railroad Administrations (2217) I conducted various field investigations of general transportation conditions which took me into Pennsylvania, Ohio, Indiana, Illinois, Colorado, Iowa, Utah, Wyoming, California, and Washington.

The information secured in my field investigations has been supplemented by documentary information on file with the Illinois Commerce Commission at Springfield, and documentary information secured from railroads' general offices. I have also supplemented it with operating data [fol. 2189] produced by the representatives of the Alton Railroad, the C., B. & Q., the Big Four, and the Illinois Central in recent cases before the Illinois Commerce Commission, some of which are still pending. This information covers not only the lines of the roads named, but also the lines of other roads in Illinois and Indiana and also conditions in Ohio. It consisted of train ratings, locomotive tractive power, and other operating data of the kind used by me in my locomotive performance studies.

I have examined Mr. Boden's Exhibit No. 101 purporting to show a comparison of locomotive performance from No. 8, Cambridge, and Pittsburgh districts to Cleveland and Lorain, Ohio.

(2218) All of the figures shown in Mr. Boden's exhibit were taken from exhibits offered by the various parties in

Lake Cargo Coal Rates, 1930, 181 I. C. C. 37. They related to the routes over which and the ports to which lake cargo coal moved. This had the effect of limiting both the routes and the destinations for which he was able to secure information.

Referring to page 1 of Exhibit 101, the figures there shown are taken from what was known as the carriers' five day study. This study covered all trains moving over the routes in question having one or more cars of coal. The Western Pennsylvania Coal Traffic Bureau vigorously [fol. 2190] criticised these figures on the ground that they were not representative of the conditions under which coal is transported, but rather miscellaneous freight traffic. The grounds of these criticisms appear at pages 42 to 49 of the Western Pennsylvania Coal Traffic Bureau brief in that case, and are summarized in the following passage on page 49:

(2220) "The five day study of the defendant carriers, offered as they are in the composite with no underlying detail for individual claims, present results that are beyond explanation and worthy of no serious consideration whatever."

[fol. 2191] I fully argee with this criticism and I consider the comparison shown on Sheet 1 of Exhibit 101 as entirely worthless for the reasons stated. However, I would like to note the results of the 5-day study from the No. 8 and Pittsburgh districts via the B. & O. to Lorain which show exactly the opposite relationship from that disclosed by Sheet 1 of Exhibit 101. These figures are taken from Boughner Exhibit 299 in the Lake Cargo Case. Ohio No. 8 to Lorain via the B. & O., 14.4 pounds of tractive effort per gross ton mile per mile of line and 652 gross ton miles per 1,000 tractive pound hours. Pittsburgh district to Lorain via the B. & O., 28 pounds of tractive effort per gross (2221) ton mile per mile of line and 612 gross ton miles per 1,000 tractive pound hours. If you average these Lorain figures with the figures given by Mr. Boden to Cleveland, Ohio No. 8 shows a distinct superiority over Pittsburgh.

The figures on Sheet 2 of Exhibit 101 are taken from my exhibits in Lake Cargo Coal Rates, 1930. They do not correctly represent the conditions on the routes studied for the reason that there have been changes in operating

practices since they were prepared. Three locomotives have been substituted for a double-header on the Pennsylvania Railroad between Yellow Creek and Shale which permits the operations of larger trains over the entire distance [fol. 2192] from Mingo Junction to Cleveland. This correction would change the Pennsylvania Railroad Ohio No. 8 figure in the last column from 22.07 to 18.06. (2222) From Cambridge to Dover on the Pennsylvania Railroad, double-header operation has been inaugurated thus permitting the handling of heavier trains from Cambridge to Cleveland. This has the effect of changing the figure in the last column from 27.79 to 18.99 as shown in my Exhibit 257 in this case.

On Sheet 3 there is one error. The first figure in the last column showing the average pounds of tractive power from No. 8 to Lorain via the B. & O. should be 14.30 instead of 15.56. The authority for this correction is Boughner Exhibits 298 and 390, and my Exhibit 445 in Lake Cargo Coal Rates, 1930. The other figures on this sheet are correct. However, the mileage covered is a small part of the total covered by my exhibits in this case.

On Sheet 4, Mr. Boden has combined the information shown on Sheet 2 for Cleveland and that for Lorain on Sheet 3, using the figures which I have already shown (2223) to be either out of date or incorrect. He also adds a B. & O. figure from Pittsburgh not heretofore shown in his exhibit and entirely different from the figure shown by him for that road on the preceding page. I have been unable to check this figure.

[fol. 2193] Even if the figures shown on Sheet 4 were brought up to date and corrected where necessary they would not fairly reflect the relative conditions from No. 8, Cambridge and Pittsburgh districts to the northeastern Ohio destinations. Mr. Boden's figures cover only 708.7 miles of service from the No. 8 and Cambridge districts out of a total of 993.38 miles covered in my Exhibit 266 in this case. His figures from the Pittsburgh district cover only (2224) 763.4 miles of service out of 1524 covered by me in Exhibit 326 in this case. Included in the mileage omitted from both the No. 8 and Pittsburgh districts are the routes of the W. & L. E. and the Pittsburgh & West Virginia, which have had more to do with bringing about this investigation than any other roads.

I have examined Mr. Petersen's Exhibit 225 which purports to show locomotive performance from the Mononga-

hela Railway mines to Cleveland. It is based entirely on the defendants' 5-day study in the Lake Cargo Case which I discussed in connection with Page 1 of Boden's Exhibit 101. For the reasons stated by Mr. Gutheim in his brief in that case I consider the figures worthless. Mr. Petersen's Exhibit 225 is also subject to criticism for the reason that it shows the locomotive performance only from Maidsville, Pennsylvania, and omits all service on the Monongahela Railway south of that point.

[fol. 2194] In addition to this omission of an important part of the Monongahela mileage the Petersen figures are not representative for the reason that he has used the tractive effort of only one locomotive out of 17 actually in service on the Monongahela Railway. The one he used is the (2225) most efficient and the only one of that type in service.

Cross-examination.

By Mr. Gutheim:

I have been asked whether the Ohio Lake Cargo Coal Rate Committee objected, as in the Western Pennsylvania Coal Traffic Bureau, in Dockets 23240 and 23241 to the carriers' figures as shown on Boden's Exhibit No. 101 of this proceeding—the 5-day study. It did object.

I don't believe the Commission has yet decided whether that is of greater value as evidence than my figures of tractive effort expenditures per gross ton one mile.

(2226) It is pointed out that on Sheet 2 of Boden's Exhibit 101 I mentioned the fact that there was a different locomotive in service, or different locomotives in service on the Pennsylvania which would reduce the average pounds of tractive effort to haul one gross ton one mile from 22.07 as shown by Mr. Boden, to 18.06.

[fol. 2195] It is shown on one of my locomotive charts. I ascertained the new figure as a result of the locomotive tractive effort studies which I submitted in this proceeding.

My attention is directed to sheet 2 of Boden's Exhibit 101 and I am asked if I have made any calculations to determine what the comparative results were as between Pittsburgh, No. 8, and Cambridge. (2227) I have made no calculation of that.

I am asked whether I gave the basic data by reason of which on Sheet 3 I changed the Ohio No. 8 to Lorain line

of figures from 15.56 pounds to 14.30. I did not give the details that went into that figure. They are not all shown on the exhibits that I referred to, in the other case. In this case I just showed what the exhibits in the other case produced. I have not given the details. I have made a calculation. (2228) The tractive power pound miles obtained by multiplying average tractive power of locomotive, you show by the distance from Ohio No. 8 is 14,945,549. The tonnage rating miles obtained by multiplying the average tonnage rating which you show by the distance is 960,333.

I am asked whether any of these changes figure in the Pittsburgh route to Lorain. I don't recall whether those went into this 16.75 figure that you show or not. I did not [fol. 2196] check the underlying figures. All I did was to check the final figures to see whether it corresponded with the exhibits in the other case, and where I found it did I did not carry the investigation any further.

(2229) Referring to Sheet 3, I am asked whether or not the correction on the B. & O. figure from No. 8 to Lorain ought not also to be carried into the corresponding figure from Pittsburgh to Lorain. I recall that the carriers' original figure in that was 25 pounds from Pittsburgh to Lorain, and we broke that down and re-worked it, and I think that 16.75 is the result—the carriers' result. The 14.30 from Ohio to Lorain is also the carriers' result. The changes they made also affect the Pittsburgh result, by pulling it down from 25, as they show, to the figures here. That would not bring down the 16.75.

I used the 14.30 in my Exhibit 445. (2230) I think that at the same time I changed the Pittsburgh to Lorain figure because of the same underlying changes in that haul. That gave the 16.75.

My attention is directed to my Exhibit 255, where you show Ohio No. 8 to Cleveland via W. & L. E. direct and tractive power expenditure of 15.39 pounds. I am asked whether that is the expenditure involved in taking a ton of coal (2231) from the mines to Cleveland or from the [fol. 2197] assembling points to Cleveland. That is the average expenditure involved in taking a train load. Reduced to a ton it takes one ton from the assembling point

to Cleveland and that one gross ton is then delivered in Cleveland.

The figure of 13.23 takes a ton from the first assembling point in Ohio No. 8 to Lorain, for delivery in Lorain. That is true of all the figures that I show down that first sheet of Exhibit 255. I believe all these routes via which I computed tractive effort expenditure on this Exhibit 255 are tariff routes, with the possible exception of the route of the P. & W. V. through B. & O.—Valley Junction. The route (2232) of the W. & L. E. through Valley Junction and the B. & O. is not the route over which the $1.45 rate applies, however, but it is the tariff route.

When I made my study similar to No. 255, but covering the Pittsburgh district coal, I endeavored to proceed throughout in the same manner by computing the pounds of tractive effort expenditure from the first assembling point to each of the destinations shown on my exhibit.

(2233) On my exhibit No. 266 we selected those same destinations for the purpose of computing our mileages—[fol. 2198] the destinations in the Ohio cases, intrastate cases.

In the detailed exhibits which underlie my exhibit 266 I showed a study designed to produce the average pounds of tractive power required to haul one gross ton one mile from the mines to Lorain on the Nickel Plate. I show that on this summary exhibit, No. 266. On the third item I show Superior Avenue, Cleveland, to Rocky River, and Rocky River to Lorain. Superior Avenue is ordinarily the junction point at which traffic (2234) connections exist and to which traffic moves from the Nickel Plate connections in Cleveland. The coal that is moved from Superior Avenue is any coal that would be delivered to the Nickel Plate at Cleveland.

I am asked whether, anywhere on this exhibit, I take into account the movement from the mines to Superior Avenue of the coal that I then take from Superior Avenue to Rocky River. The delivery would be, taking the Wheeling as an illustration, from the new yard at Cleveland, thence into Superior Avenue yard of the Nickel Plate Railroad. (2235) The movement from Dillonvale to Cleveland, via the W. & L. E., is shown on Exhibit No. 266 as 139.4 miles. That goes back to one of my underlying exhibits and takes a car of coal from Dillonvale to Cleveland. The ton for which

I compute the tractive effort expenditure on that haul was [fol. 2199] delivered in Cleveland. It is suggested that, having delivered that ton in Cleveland, it can't be delivered in Rocky River. If it has been consumed in Cleveland, naturally that is the end of it. I gave the item into Cleveland on the Wheeling & Lake Erie, thence it is a transfer move from one yard to another. (2236) The next one would be the New York Central, Minerva to Cleveland.

In other words, if we take a ton from Minerva to Cleveland with a tractive effort expenditure of 14.69 pounds, we deliver that in Cleveland, and don't deliver it at Rocky River; but if we had a car going through from the mines to Rocky River, it would not be delivered at Cleveland, it would be a continuous movement. On a car going through from the mines to Rocky River, the tractive effort expenditure up to Cleveland is shown on the exhibit. I gave the figure for the Wheeling & Lake Erie, Dillonvale to Cleveland, 139.4 miles. Follow that throughout and get 15.39 pounds.

(2237) It is true that on my exhibit I do not show, stated separately in one figure, the total average tractive effort expenditure for moving a ton of coal through to Rocky River from Dillonvale. I have not made a composite average from all mines to any one individual destination. I [fol. 2200] made an average from all groups to all destinations. I have treated each piece of track once, and I explained that in detail on my direct. In the Lake Cargo Case, to which I have referred, I did make a summary showing each piece of track treated once. I haven't the exhibit here now, but I know that I did it.

[fol. 2201] (2238) I am asked whether it is not a fact that in my Lake Cargo exhibits I made a through computation from Ohio No. 8 to Lorain, to Ashtabula, to Huron, to Cleveland and Erie, treating each destination separately, from the mines to each destination. I don't recall that I made a separate average from all origin points in groups to one particular destination. I made them on an average from all groups to all the lake ports combined. I took the coal from the first assembling point in the group to each port, but I don't recall that I have made an average for each port, separately. I took the tractive effort into account all the way through on that route, but I think that I averaged all the ports reached by any individual railroad. I did it by each individual piece of road as I have shown

here in exhibit 266, rather than by total routes. (2239) I took each individual section of railroad over which there was a performance and made an average of that to each individual piece to final destinations.

(2240) Minerva, shown on the exhibit, is an assembling point in the coal fields. The figure of 14.69 tractive power pounds is the average of one ton in one train, from the coal fields to Cleveland, being the tons delivered in Cleveland.

Kingman, is not in the coal fields. It is a yard of the [fol. 2202] New York Central Railroad. In order to take coal from Cleveland to Huron you would have to take it from the mines to Kingman, or some place in that vicinity.

Superior Avenue is not in the coal fields. To take coal from Superior Avenue and Rocky River, you would first have to take it from the mines to Superior Avenue.

Rocky River is not in the coal fields. To take coal from Rocky River to Lorain, you would first have to take it from the mines to Rocky River. From that point (2241) I could just as well have shown the figure from Superior Avenue to Lorain as one figure, rather than two, but I had them broken up that way on the underlying exhibits and I kept them in that manner.

Canton is not in the No. 8 coal fields. To move coal from Canton to Brewster, you would first have to move it from the mines to Canton.

Dillonvale is in Ohio No. 8. I don't believe Brewster is. In order to move No. 8 coal from Brewster to Huron, you first have to move it to Brewster.

To move No. 8 coal from Lake Junction to Lorain, you first have to move it from the mines to Lake Junction. [fol. 2203] The same is true with respect to Harmon (2242), Columbia, Orrville Junction, and Mogadore. In the case of Mingo Junction, you start at the coal fields.

When you move coal from Bayard to Canton, that is, No. 8 coal, you first have to move it to Bayard. When you move it from Canton to Massillon, you first have to move it to Canton. In the case of Ravenna, you first have to get it there to take it to Kent. And the same is true with respect to Kent, when you (2243) take from Kent to Akron.

Bellaire is in the coal fields.

When you take coal from Dover to Valley Junction, you first have to take it to Dover. When you take it from Valley Junction to Cleveland, you first have to take it to Valley

Junction. When you take it from Lester to Lorain, you first have to get it to Lester. When you take it from Warwick to Akron, you first have to get it to Warwick. When you take it from Hopedale to Pittsburgh Junction, you first have to get it to Hopedale.

When you take it from Cambridge to Bayard, you start at the coal fields.

In all these instances it is true that on the exhibits underlying No. 266, the average pounds of tractive required [fol. 2204] to haul one gross ton one mile is (2244) shown from the mines to these destinations over in part the piece routes that I show on this summary, Exhibit No. 266.

(2245) I am asked whether there are any of the pieces of track shown on this Exhibit 266 that are used solely in the handling of Cambridge coal as distinguished from No. 8. The line from Cambridge to Dover, the Pennsylvania Railroad would be used only for Cambridge coal. That is all I have shown; it is the only one.

In the final figure of 15.92 pounds, all Ohio average, I have been dealing with the traffic density of coal. I have not given consideration to the amount of No. 8 tonnage (2246) that moves from the New York Central mines on the New York Central tractive effort figures, the amount from the Wheeling mines on the Wheeling tractive effort figures, and so on.

[fol. 2205] (2249) Exhibit No. 326, a summary of locomotive performance from the Pittsburgh group to northeastern Ohio destinations, was made in the same general way as my summary for No. 8. That is, the underlying exhibits will show the average pounds of tractive power required to haul one gross ton one mile from the assembling district in the coal fields in each instance to the final destination. The destinations in this exhibit are selected in the same manner as the exhibit dealing with Ohio No. 8.

In this Exhibit No. 326 I show a final figure from the Pittsburgh district from each origin line in the Pittsburgh district to each destination, with one exception—the Bessemer & Lake Erie Railroad, which has no operating mines.

On the Pennsylvania, the destinations in northeastern Ohio to which I show final tractive effort expenditure figures are (2250) Lorain, Canton, Orrville—apparently Cleveland was not there, but it ought to be there—Cleveland was there. Cleveland would be included in the routes of the

Pennsylvania and the New York Central from Youngwood to Lorain. That is entirely within the haul from the two mines to Lorain would be included the haul to Cleveland. I believe it would all be there, with the possible exception of a mile or two in the Cleveland terminal. As I said before, if the car terminated at Cleveland of course it would not go on, if it terminated at Lorain, it of course did not terminate [fol. 2206] at Cleveland. If we were handling a car for Cleveland and another car for Lorain (2251) it would be two cars that would be started out of the assembling fields. If one dropped off at Cleveland, the other would go on to Lorain if it was so consigned. Of the various hauls from and to, shown on Exhibit 326, I am asked what are the hauls that start from the assembling points in the coal fields, meaning as to the origin of the coal. It would be Youngwood, West Brownsville, Sculley, Pennsylvania. Sculley is included in the first item to Lorain. In addition to the lines from Youngwood to Lorain and from West Brownsville to Lorain, we also have in the first item Sculley to Lorain. That is all the Pennsylvania origin district carried all the way through to Lorain. After you get from Youngwood to West Brownsville as a point of origin in the coal field, the next point of origin in the coal field, on Exhibit 326 (2252), is the territory, Glenwood—Elmwood on the B. & O., or rather Elmgrove. P. & L. E.—New York Central, Newell to Jacobs Creek, P. & W. V., Rook. That completes them. With respect to all of the origins other than those four shown in the column headed "From" it would be necessary in order to move coal from those points to first bring it from the assembling point in the coal field to that point.

The difference between the second item, "Conway via Old Main Line to Canton" and "Conway via Bayard Cutoff to Canton" is that there are two routes. A car of coal [fol. 2207] going to Canton would move over one or the other of those routes; they are both available routes.

I would not, under these circumstances, reconsider my method of computation here in including both of these (2253) routes in the average from the Pittsburgh district.

It is pointed out that the first of these routes has a tractive power expenditure of 30.27 pounds, and the second of 23.98 pounds, both being considerably higher than the average from the entire Pittsburgh district, shown as 16.05. If either one of those should come out of the computation

the result would be to reduce the 16.05 pounds somewhat. Out of a total of 1524 miles a reduction of 76 or 78 miles I would not say would make it differ greatly.

The Glenwood—Elmgrove originating point is the line between Glenwood and Elmgrove that was shown by the B. & O. people in the Lake Cargo case. That is, I have added into that computation of locomotive performance on the Glenwood-Elmgrove line. (2254) I don't know whether or not I have been over that line. There may be some mines on the B. & O. on the main line east of Glenwood. I have not shown any figures with respect to that movement. I do not know that that is a water level line along the Youghiogheny River and the line from Glenwood to Elmgrove is a hill line between the two rivers. I have selected the route and the detail from the figures put in by the B. & O. Rail-[fol. 2208] road in the Lake Cargo case. I did not make all of this up from my own information.

The movement of Pittsburgh & Lake Erie coal to Cleveland would be computed in the route of the New York Central, Newell to Jacobs Creek to Huron, or Newell, Jacobs Creek to Youngstown, which is included in that route, and by adding on the Erie Railroad from Youngstown to Cleveland.

(2255) When I took the car of Pittsburgh & Lake Erie coal through Youngstown to Huron, of course I did not have the same car to take to Cleveland. In order to take a car from Youngstown to Cleveland over the Erie interchanged at Youngstown from the P. & L. E., I would first have to take it up the Pittsburgh & Lake Erie, Youngstown.

I am asked whether the computation of average pounds of tractive power required to haul one gross ton one mile, 16.05 shown on this Exhibit 326 for the Pittsburgh district, gives any consideration to the tonnages or the variations in the volume of the tonnage that moves over the different routes. It does not give consideration to the traffic density of coal. Nor does it give consideration to the fact that a different tonnage may have moved from the Pittsburgh district over the P. & L. E. than moved from the Pittsburgh district over the B. & O.

Examiner Trezise: What do you mean, different tonnage?

Mr. Ballard: Whether it is a weighted average. The averages are not weighted by tonnage either by routes or pieces of line.

(2256) I am asked to point out on my exhibit No. 327, with respect to Connellsville performance, to point out the hauls that commence at the assembling points in the coal fields. Redstone, Pa., on the Pennnsylvania Railroad; Van- [fol. 2209] zandt, Pa., on the Monongahela Railroad; Dickinson Run, Pa., on the P. & L. E.; Connellsville, Pa., on the B. & O.

(2257) With the exception of Redstone, Van Zandt, Dickinson Run, and Connellsville, it would be necessary in order to handle the coal from all the other originating points there shown to first handle the coal from the coal fields to these origin points.

The situation with respect to Conway via Old Main Line to Canton and Conway via Bayard Cutoff to Canton, as shown on this Exhibit No. 327, is the same as that to which I was asked to answer with respect to Exhibit 326. The coal could not move over the two routes.

(2258) The rule for selecting the destinations on this Exhibit 327 is the same which I have given in connection with the other exhibits of similar character. I selected the eight northeastern Ohio destinations. The figures shown on this exhibit and the final average of 15.90 pounds from the Connellsville district do not take into consideration to any extent the tonnages actually transported over those routes.

By Mr. M. Carter Hall:

(2260) I don't recall ever giving in any case in which I testified a more complete list of my experiences and qualifications from an operating standpoint than I gave this morning. It is not a fact that the last connection I had with any railroad in an operating capacity was during the years 1905 and 1906 with the Southern Pacific at Los Angeles [fol. 2210] because I was connected with the operating departments until the year 1912. The positions (2261) I occupied up to 1912 are all in the operating departments, and while they do not all involve actual yard work, still it is part of the operating department, and I worked very closely in many of these positions with the yard department.

When I was bill clerk for the Chicago & North Western in 1906, I reported to the freight agent at Wood Street. I did have something to do with the operations of the Chicago & North Western at that time. I can recall quite

clearly that for a period of my time at that station it was my duty to get the bills ready and line up the trains for movement on the road. (2262) I don't think those are the ordinary duties of a bill clerk. I don't know that you would call me a special bill clerk; I could fit in most any position in the local office.

I stated that from the year 1906 to 1912 I was bill clerk, chief rate clerk, and accountant for the Chicago & North Western Railway at 40th Street, Chicago. I did have to do with the operations of the Chicago & North Western Railroad during those years. My title was chief rate clerk of the out freight department, but we had the duty of getting the bills ready (2263) for movement of trains on the road [fol. 2211] and the bills lined up, and the yardmasters and train crews were up in our office continuously. They were there in connection with every movement of trains out of that yard. It was customary for the rate clerk and bill clerk at that station to have something to do with the operations of the railroad.

I have had experience before I became a bill clerk at the places named that qualifies (2264) me to perform other duties than the duties of bill clerk, and I commonly did.

It is pointed out that I testified this morning that I was the yard clerk with the Chicago & Eastern Illinois Railway in 1898, and again was yard clerk, a road brakeman and yard switchman with the C. & E. I. at Chicago in 1898 and 1901. I would *be* not be willing to say that that was the last time when my duties with any railroad were, strictly speaking, those which pertained to operations of a railroad. Nor would I be willing to say that after 1901 I had no connection with the operations of the railroad by which I was employed, except when I was bill clerk for the Chicago and North Western, rate clerk and accountant. With the exception of the period at Los Angeles on the (2265) Southern Pacific Railroad and my connnection with the C. & E. I. Railroad, I will say that my duties were not strictly con- [fol. 2212] fined to yard work.

It is on the basis of my testimony with respect to my experience in the operating departments of railroads, at page 1585 of this record, that I testified that of 26 years' experience in railroad service about half of the time was in the operating departments and the remainder in the traffic

departments. I stated the positions I have held, which were from 1895 until 1912 in the operating departments.

I do not recall my testimony with respect to my qualifications in the West Kentucky Coal Bureau Case, Docket 21838.

(2268) I am asked whether in connection with my positions in the operating department of any railroad up to 1912 I had anything to do with fixing tonnage ratings. I had to do with the selection of the cars and trains that went into the making up of the tonnage that the train would haul on the road. (2269) I fixed tonnage ratings. If you mean by that that I made the schedules for all the locomotives operating, I did not. I mean I have helped switch the cars in the train, get all the bills ready and assign the particular cars to the yard department, switch into the train, and I have checked them after they got them in the trains to see [fol. 2213] if they got the proper tonnage in them, used my discretion as to how much tonnage they should haul on certain days.

By the Examiner:

In answer to the Examiner's question as to whether, had I worked for the Southern Pacific in 1906 as a yard clerk, and had spent my entire life working as a yard clerk for the Southern Pacific, would I have learned as much as I have learned since that time in my field service. I don't believe I would, because my knowledge would have been confined strictly to that local railroad, whereas my investigations have carried me over the eastern part of the country pretty generally and enabled me to observe operating conditions on all of the railroads, (2270) and I have talked to operating men of all ranks and I consider it an education fully as good as I could have gotten if I had gone to a university.

By Mr. M. Carter Hall:

(2271) When I testified earlier that during the 15 days you mentioned I visited, apparently, about 23 points, I mean that the Commission is to take me seriously when I say that in all those points I visited I called at all of those points at the railroad yards and roundhouses and interviewed employes of the railroad, such as yardmasters, yard clerks, yard agents, car distributors, train crew employes,

and so on. I would not testify unless I expected to be taken seriously.

[fol. 2214] Concerning my employment in 1930 in connection with the Ohio Lake Cargo Coal Rates Committee, it is pointed out that my investigation covered a period of about a month and twenty days. I was not continuously engaged in that investigation in the field for that period. (2272) I would have to refer to my notes to get the exact number of days I was in the field. It is pointed out that in that one month and twenty days it appeared that I visited sixty-seven yards and docks at least. I spent as much time at each yard and dock as was necessary for me to learn whatever I wanted to know at that particular point.

Referring to my next investigation in Ohio, beginning September 29, 1932, and ending October 6, 1932, or 8 days, during those 8 days I visited 15 yards. I spent whatever time I considered necessary at each one of those yards to get the information I desired. (2273) It was my custom generally, in all my investigations, to try to see everyone who could be seen.

In going on to Illinois and Indiana in 1928, when I say that my investigations covered from August 15 to December 8, intermittently, I mean that I did not spend all that time continuously on the road. (2274) I spent as much time at each of the 72 places visited as was necessary to ascertain what I came for.

In what I have described covering my field investigations between 1928 and 1932, I may have skipped a place [fol. 2215] or two that I have gone to; generally I should say that this represents my entire field investigations in the particular territories I have mentioned.

(2275) I am asked to refer to the figures showing the average distance of 112.7 on my Exhibit No. 331, in the second column of figures. The figures on Exhibit No. 331 from Ohio No. 8 and Cambridge were computed from the information shown on Exhibit 246. (2276) Note B to the third column on Exhibit 331 describes the formula. Starting with Canton as an illustration, I put down on a piece of paper 90 mines and I put down a total of 6,709.8 miles, and then I took Orville, 90 mines and 7,988 miles, and I did the same throughout every one of those blocks and added

the total miles and total mines and divided the total miles by the total mines, and I got that average.

It is pointed out that at page 1599 of the record the question was asked me, "What have you to say as to the propriety of the all-tariff origin basis for computing average distances?" I answered, "In coal districts as large as those in the Appalachian field there are many points included in the tariffs from which no coal has ever been shipped and none is ever likely to be shipped, and we feel because of that (2277) reason some formula must be used for obtaining a mine list and excluding tariff origins which would never ship coal. Furthermore, the tariff list as used [fol. 2216] by Mr. Kern contains many duplications. As an illustration, the B. & O. R. R. in the Davis tariff lists both mines and stations and by using such a list duplications result because there may be three mines and one station listed, where in order to obtain an accurate result the stations should be discarded. Another illustration is the B. & L. E. in the Pittsburgh district. Mr. Kern lists 15 origins whereas actually there are only four mines served by that railroad in the Pittsburgh district. The 15 origins include stations, mines and other railroad facilities in that district." Mr. Ballard then asked me, "You deduce from the considerations you have just referred to, as I understand it, that it is necessary to get some sort of a mine list if you are going to make a fair average distance from a mining group?" I answered "That is correct."

I am asked now if the answer made at that time as to how distances should be computed for use in this case is my view. Yes, I think on the whole that is correct.

(2278) Mr. Hall asks me now how I would proceed to get at what are potential points of origin of coal. My viewpoint is, as to what is the most practical way of ascertaining what is a potential mine, is to take the carriers' list of mines and eliminate from that list all mines which have been listed in the state bureaus of mines as being abandoned. If I had the time to go over all the fields and look at every mine and question the owners, I might be able to give you a better method, but I haven't got that time.

[fol. 2217] I am asked if the methods used by me in connection with Exhibit 246 in this case for computing average short line distances from Ohio No. 8 and Cambridge coal groups to the northeastern Ohio destinations are the same

as was used in the west Kentucky case, Docket 21838. I did not compute distances, as I recall, in (2279) the West Kentucky Coal Case. That work was done by a man named Word.

My attention is directed to page 1517 of the record in the West Kentucky case, where, referring to Word's Exhibit 223, I expressed the opinion that "In a big field like we are dealing with here, where all the coal is not handled over the short lines, the routes that actually participate in the traffic ought to be given consideration." That is my personal view as to a study of the transportation conditions, but when it comes to a question of making rates I think that the Commission's formula of making rates is proper, that is, using the short routes.

My attention is directed to page 1647 of this present record, where in describing my locomotive charts, I said: "An average (2280) has been made for each entire route studied showing the pounds of tractive power required to haul one ton one mile per mile of line, based on the average train over the entire route and the average tractive power required to haul that train over the entire route." I followed the same method of treating entire routes as I there speak of, in the West Kentucky case and in the Lake Cargo cases, 1930, the Eastern Coal Case, the Illinois Intra-State Rates, in Docket 23922.

[fol. 2218] It is pointed out that at page 1648 of the record, I said, "the tonnage rating of a locomotive takes into account all factors with which the operating department is confronted in the movement of trains, and is the result of the experience of the railroads," etc. I am asked whether that is the final expression of my theory, or whether I still feel that the tonnage rating has to be combined with the tractive power in order to get the final results. Not always, but in most of my studies I have done that. I have combined tractive effort with the tonnage ratings. (2281) I am not conscious of any change in my theories. I may have described it a little loosely in some case or other, but I don't think there is any difference in the method.

In my criticisms of Mr. Boden's Exhibit 101, one of my criticisms of his testimony was based on changed conditions since I introduced my exhibits in the Lake Cargo Case, 1930. And of course I criticized the carriers through-

out for their method of putting in their five-day studies and the results obtained from the five-day studies.

(2282) (The witness here identified a copy of exhibit 428, in Docket 23430, Central Pennsylvania Coal Operators Association case, which document was marked for identification, Exhibit "X".)

The witness next identified a copy of Exhibit 419 in Docket 23130, which was marked for identification, Exhibit [fol. 2219] "Y."

(2283) I am asked to look at my Exhibit 328, in the left-hand column, where is shown the figure 511.8, miles of locomotive service, Fairmont to Cleveland, and to explain how that mileage happens to be so large. Two groups are included, as shown on the exhibit from Fairmont.

I am shown my exhibit "1" in Docket 23922, sub No. 1, the case involving the rates from Indiana to Illinois. I am asked whether between the Linton-Sullivan group and the Brazil-Clinton group there are two or three routes to Hoopeston, Illinois. There is more than one route to Hoopeston. (2284) Hoopeston is a point to which the Commission has prescribed rates in the Iliff-Bluff Chemical Company case. It is probably one of the points shown on my Exhibit 253. The rest of the territory, I should say, is generally within the 23922 territory. This exhibit has not as yet been marked for identification (2285) and shows certain destinations to which the Interstate Commerce Commission prescribes reasonable maximum rates from Indiana; and they are marked in red on the exhibit, and the 23922 territory as covered by that exhibit is generally shown in red and green, the territories south of Hoopeston. There was an outstanding order against Hoopeston which was not affected by the order in 23922. [fol. 2220] There is a route via the C. I. & L. and the Nickel Plate from the Linton-Sullivan group to Hoopeston. There is a route from the Linton-Sullivan group via the E. I. & T. H. and C. & E. I. to Hoopeston. (2287) I believe there is a route via the Milwaukee & St. Paul and the Nickel Plate from the Brazil-Clinton group to Hoopeston. I am now asked whether or not those three routes pass through country which is more or less generally the same kind of country. Well, there are some exceptions to that. Some of those routes carry further east into Indiana along

he Wabash valley, and that territory is a little more broken there than it is west of the Indiana-Illinois state line. The line of the C. & E. I. railroad from Danville to Hoopeston is west of the Indiana-Illinois state line. The route of the Nickel Plate Railroad, as I recall, is reached through some points in Indiana. That would be true as to traffic from the Monon. I think the route of the Milwaukee & St. Paul lies between those two routes. I don't know that I can give you the point of interchange from memory. (2288) I think Humrick, Illinois, is the Junction point. I am asked whether there are any striking differences in terrain or difficulty of operations as between the Milwaukee route and the C. & E. I. route on the one hand or between the Milwaukee route and the C. I. & L. route on the other hand, to that same destination territory, or in that same general [fol. 2221] territory. I think the transportation conditions on the Milwaukee are superior to those on the Monon railroad. I cannot give the difference any more accurately than is expressed by my tractive power figures.

(2289) I am asked to refer to my exhibit No. 14 in this case, 23922, second page, and to state whether the tractive effort figures applied to the three routes we have been talking of reflect differences in operating difficulties to the extent that there are differences in the index figures themselves. I should say that they do.

I am asked whether I think that my tractive power figures in a territory where the routes lies as close together as the three routes mentioned, and where my tractive effort figure reflects a difference of as much as fifty per cent to seventy-five per cent—do those tractive figure differences represent actual differences in operating difficulty, in terrain, in grades or curves, or anything else as between those three lines. (2290) My answer is yes, they represent the resistance met in handling of trains.

(2291) There is a difference between tractive effort and train resistance. They are not the same. There is considerable difference between train resistance and all the operating difficulties. You may have a straight track with a slight train resistance, but it may be in such a location [fol. 2222] that they have short passing tracks and therefore they may have to cut down the trains. The tractive power represents all resistance and all train factors when coupled with the train rating. It is my view that between

the three routes described, the difference between operating conditions, transportation conditions and the movement of the trains, is whatever my figures show, whether they are greater or less than 50%.

[fol. 2223] Testimony Taken at Columbus, Ohio, February 8, 1933

Cross-examination of C. B. Ackerman (continued).

By Mr. Petersen:

(2293) My first objection to the Petersen exhibit was that the figures covered only the movement from Maidsville, W. Va. I am asked whether my study indicated that the movement south of Maidsville was any more difficult than north of Maidsville. I did not break it up by sections.

(2294) I am familiar with the location of that line (2295), and I don't know whether they could get a better result by breaking it up in sections or not.

My second objection to the exhibit was that Mr. Petersen used only one engine. At the time I made this investigation, I had only one of that type of engine, and that was an investigation that was made on May 27, 1930, shortly before the trial of the lake cargo case. I have stated that that was their most efficient locomotive; it is a bigger locomotive and has a booster. As to whether this particular locomotive would necessarily show a lower tractive effort [fol. 2224] required on this line than the use of the smaller type of engine, that depends a good deal on how it is used and the purpose to which it is put. The amount of tonnage (2296) that the engine happened to be hauling on the particular days used in the carriers' study would influence the 5-day study materially. That was one of my objections. We did not think it was representative because they were selected dates and it included everything in the train, whether it was coal, live stock, merchandise, or what not, and we criticised it for that reason. I said that I did not believe it was representative because it only covered a part of the route and was made with only one engine and the only engine they had at that time of that type. (2297) I know that those figures were predicated on what the car-

riers selected in the Lake Cargo Case as their presentation to the Commission.

The study I have presented in this case and also in the Lake Cargo Case covers the entire Monongahela Railway, from Fairmont to Brownsville Junction, but it did not take in the branches. I stated at the time I put those exhibits in the record that it was possible to build up from that the movement over any route that might be selected to each of the principal destination points in this northern [fol. 2225] Ohio area. You can make any combination you want to from those figures within the territory covered by my investigation.

I selected the P. R. R. route in my study. The short route to Cleveland is via the P. & L. E. and Erie, by a few miles. (2298) I offer no explanation as to why I picked the P. R. R. in preference to the short route, in making my study, because it is all reflected in the average of the territory anyway. It would not have made any difference whether I had put the Monongahela in connection with the P. R. R. or P. & L. E. I am asked whether in connection with the average figure I have shown, I have taken the through rates from the Monongahela to these various destinations in arriving at my average, that is, each one separately. I did as to the Pennsylvania Railroad, but not as to the other routes. You might do that if you wish. Most of the factors are there. In the average which I have shown, the Monongahela does not appear more than once.

[fol. 2226] Redirect examination of Witness Ackerman (continued).

By Mr. Ballard:

(2299) I don't know that I can recall what information Mr. Hall asked for yesterday. One of the things, as I recall, was how the time was divided in the Eastern Ohio and Lake Cargo investigations in 1932. Well, from September 29 to October 1, and from October 5 to October 6, 1932, eastern Ohio. In the Illinois-Indiana-West Kentucky territory, August 18, 1928, August 26, 1928, September 18, 1928, September 21, 1928, December 4, 1928, December 8, 1928, January 1, 1929, February 10, 1929, to February 15,

1929, March 6, 1929, March 7, 1929, April 2, and 3, 1929, April 11 and 12, 1929, June 1, 1929, July 23, 1929, August 1, 1929, and August 2, 1929, August 31, 1929, to September 12, 1929.

Recross-examination.

By Mr. M. Carter Hall:

Those are the actual days out in the field actually investigating operating conditions. It is supplemental to the information I gave with respect to the three series of investigations which I mentioned yesterday.

(2300) With respect to my computations on Exhibits 266 [fol. 2227] and 267 and Exhibits 327 to 330, the final figure, as I have explained time after time, shows the amount of tractive effort required to haul an average ton one average mile per mile of road based upon train performance and not based upon one ton performance. It makes no difference whether it is one ton of coal or one ton of anything else. It is not a ton of train loading, it is a ton of train weight. (2301) It is not one ton of coal. It is an average ton. My final figure of tractive effort represents an average one mile per mile of road of mathematical calculation of train performance. It is resolved into a ton for comparative purposes, but it is not a movement of one ton in any instance, because there is no such thing as a movement of one ton of gross weight.

You are correct in your understand- that my unit means one gross ton derived from the handling of a train.

Mr. Hall here asked the witness: (2302)

"Mr. Ackerman, we have taken your computations on Exhibits Nos. 266 and 267 and Exhibits Nos. 327 to 330 which purport to show the tractive power necessary to [fol. 2228] move one gross ton of train from the various districts to the various destinations involved. And by consolidation under your method of consolidating individual districts, you have arrived at a figure purporting to show tractive effort per gross ton of train for the entire group of districts involved. That is, Illinois-Indiana, Ohio No. 8, and Cambridge, the upper crescents, the lower crescents of 15.08 pounds per ton? The question is what, if any, relation does this figure of 15.08 have to operating or trans-

portation conditions in Ohio, in Pittsburgh, in the other Crescent districts, or in Illinois-Indiana territories?" Mr. Ballard objected to the question on the ground that "it is not witness' figure, it is a consolidation of figures taken from various exhibits introduced by him and reduced to a single figure, and he is not responsible for it and has not offered it." (2303) Mr. Hall stated that he would not press the question in face of that objection, but that he wanted the record to show that it was the position of Mr. Ballard that he did not want the question answered.)

[fol. 2229] I am asked whether it is my opinion that an average of tractive power necessary to move one gross ton of train computed in accordance with your method, as shown by your Exhibits 266 and 267 and 327 to 330 from Indiana-Illinois to Illinois, from Inner Crescent and Outer Crescent to Cleveland, from Fairmont, Connellsville and Pittsburgh to Cleveland, from Ohio No. 8 and other Ohio districts to Cleveland, reflects whatever differences there may be in topography, curves, grades, tonnage ratings, tractive power, and all the other operating conditions which affect the movement of trains in all of these territories. My answer is "Yes." I think that is a fair answer.

By Mr. Day:

It is pointed out by Mr. Day that on my Wheeling Exhibit No. 255 I refer to that piece of line from Lake Junction to Lorain as part of the Wheeling & Lake Erie. I think that should properly be on the Lorain & West Virginia. (2304) It is shown in the Wheeling & Lake Erie time table.

It is pointed out that on my Exhibit No. 264, dealing with the route of the Illinois Central from southern Illinois, I show in the first block of figures on page 2 of the exhibit under the heading, "Miles of Locomotive Service," quite a number of points. I am asked whether it is not a fact [fol. 2230] that all of the southern Illinois points listed except Duquoin and Carbondale are on branch lines of the Illinois Central in southern Illinois. That is true. The southern Illinois territory is all on branch lines of the Illinois Central.

On Exhibit 267 I summarize the showing as to the Illinois Central from Southern Illinois, and indicate the miles of

locomotive service from southern Illinois to Centralia as 153.8 miles. That is the miles of track that tap the southern Illinois territory. The would not be the average distance.

The next figure is from Centralia to Mattoon, miles of locomotive service are shown as 79.8. (2305) It is suggested that just by glancing at the exhibit it would indicate that the distance from southern Illinois might be in the neighborhood of 233.6 miles to Mattoon. That is so, if you add together the distance from the furthest mine on each branch, but that would not represent the average haul. The average haul from southern Illinois mines to Mattoon via its short line would be around 123 miles.

The line indicated on my first page of Exhibit 264, which it is pointed out has no description or designation, is the Edgewood Cutoff extending down through Edgewood, down into Paducah, Kentucky. That is the line which moves the west Kentucky Coal principally.

[fol. 2231] It is pointed out that I have testified a number of times that no piece of track covered by my exhibit is included more than once. It is suggested that I do duplicate in cases where I want to go in a reverse direction on a particular piece of track. I did that in one instance where the tonnage rating (2306) was different, maybe more than one, where the tonnage ratings and performance were different in one direction than another, but where they are the same in both directions, we have only used them once.

Mr. Day points out that he noticed such instances on several of my exhibits—the Illinois Central, the Milwaukee, and the C. & E. I., for instance. There are cases where the traffic would move two ways. It would move from the Brazil-Clinton district north bound and from the Linton-Sullivan district south bound.

It is pointed out that on one of my maps, Exhibit 265, I show a route of the Big Four from southern Illinois to Peoria and it is suggested that that route would be somewhat circuitous. There are shorter routes, but that line also took in other destinations. It is suggested that the map indicates that the Big Four from southern (2307) Illinois proceeds in a somewhat northeasterly direction and cuts corners at Danville, whereas the direct lines proceed [fol. 2232] almost directly northward, or perhaps north and a little west from the southern Illinois fields to Peoria. You can compare the Big Four route with the Illinois Cen-

tral route, which is also shown from that territory. The Big Four has a longer route than the Illinois Central.

By Mr. Bull:

Referring to the second page of my Exhibit 313, it is pointed out that I do not show any tractive effort from Benwood to Martins Ferry. (2308) As I understand, that is just a short distance and it is a switching service.

Mr. Bull: Do you know how far it is, Mr. Hewes?
Mr. Hewes: 8 miles.

The Witness: On Exhibit 249 the through distances to Cleveland shown as 183.1 miles should probably be 200 and some odd miles. That shows the extent of the circuity greater than I have shown there. I will check the correct figure.
[fol. 2233] (2309) The distance to Bellaire shown on my exhibit as 46.2 miles is as average built up over Lore City, the average distance from the mines to Lore City and 46.2 miles beyond. On page 3 of my Exhibit 246 I show the mine locations of the B. & O. mines and distance to Cambridge. I think it could be worked out from that. The haul is in the reverse direction, however, to Cambridge.

By Mr. Webber:

"Mr. Ackerman, referring first to your Exhibit No. 313, I find at Page 1691 of the record Mr. Ballard asked you this question: 'How did you select the (2310) rates which you used in making these interstate average distances?' And the answer was: 'Having first located the origin territory, I consulted the junction point maps of the railroads and endeavored to trace out the short routes from that map. Having done that, I compared it with the tariff to find whether that was a tariff route.' Then Mr. Ballard asked you: 'So that your first process was to select the shortest reasonable route you could find and then look in the tariff and see if it was in the tariff?' And the answer was: 'Yes.' The next question was: 'Was the effect of that process to exclude any tariff routes?' And the answer was: 'No, I have not excluded any tariff routes.' The next question was: 'In other words, you found no case where the short reasonable route selected by you was not pub-

lished in the tariff?' And the answer was: 'That is cor-
[fol. 2234] rect.' Now, I wish you would look at your Exhibit in which you show routes from Fairmont to Cleveland, among other things—Exhibit No. 313."

The Witness: "Those questions and answers are directed to the distances and not to the locomotive formula charts." I thought that I selected the shortest route that I could find. I have made a further computation and find that in one or two instances that was not done.

(2311) It is pointed out that on my Exhibit 313 one of the routes I showed there to Cleveland from Fairmont is through Lumberport. It is true that I do not show any route from Fairmont to Moundsville, Benwood, and so on to Cleveland. (2312) There is such a route, and the reason I did not select that route was because of those shown in the Lake Cargo Case. For the locomotive charts, I did not take the shortest route there in making up my diagram for my figure. I tried to cover the field rather thoroughly.

Referring to my Exhibit 328, I am asked to explain how I computed the figure of 511.8 miles of locomotive service, Fairmont to Cleveland. I think you will find the figures on the Fairmont chart of the B. & O. Railroad. I took two routes and added them together. It is suggested that I did not do that when we were talking about Canton, that I show miles of locomotive service over two routes to Canton. (2313) The distance to Canton is based, on Page 2 of Exhibit 313, as you see it. I calculated the distance to Akron and then added on the distance from Akron to Canton. It is [fol. 2235] pointed out that from Fairmont to Cleveland, I show via Akron, 511.8 miles of locomotive service. That includes the miles of locomotive service which I show from Fairmont to Holloway, from Holloway to Warwick, from Warwick to Akron, and from Akron to Cleveland. It is suggested that I have added them all together and that I have a duplication, in Exhibit 328. I might have a duplication there. I will have to check it up.

In my Fairmont to Cleveland distance I have included a route to Connellsville and New Castle. That is a long route. (2314) As to whether I know whether any coal moves from Fairmont that way to Cleveland, I can't say I followed the cars. It is an available route that can be used. I don't know that I can show an actual movement over that route or not. All I can say is, I believe coal moves that

way from Fairmont to Cleveland. I don't know of any actual shipments.

[fol. 2236] On my Exhibit 310, where I show Elm Grove as a starting point for movement of coal to Lorain, Akron, Cleveland, etc., the route used is through Glenwood and New Castle Junction. (2315) As to whether I know whether any coal moves or ever has moved from Elm Grove to Cleveland via that route, all I have on that is what the Baltimore & Ohio has shown in its Lake Cargo Case. That is the way you (Mr. Webber) constructed the route and you showed a 5-day test study covering the route.

I know that your 5-day study included trains having only one or more cars of coal. (2316) You say that the fact is you do not handle any lake coal to Cleveland. But you did have a movement of coal to Lorrain, and that takes it through Akron Junction and from Akron Junction on it is only 35 miles, and if you carry it through Akron Junction, it seems reasonable that you would take it on over that route up to Cleveland. It may be that coal moving to Lorain would move through Holloway, but you did not show any such movement in your 5-day study.

(2317) It is pointed out that on this same exhibit I show B. & O. Pittsburgh group to Massillon via the B. & O., and that is through Warwick, and I show miles of locomotive service, 214.1. I am asked whether I know of any movement of coal from Elm Grove to Massillon over that route. I don't know of the actual movement of all your [fol. 2237] traffic. That is a logical route. The short route from Elm Grove to Massillon would probably be by way of Holloway. I have no idea of what the difference in mileage would be. It may be true, as you point out, that my figures are 110 miles in excess of the short route.

The exhibit shows Elm Grove, Pennsylvania. That ought to be West Virginia.

(2318) It is pointed out that in Mr. Keeler's cross-examination, with respect to the conditions on the Monongahela Railway south and north of Maidsville, Mr. Keeler used the words "entire railroad" in his question. I am not offering any opinion with respect to the Monongahela other than the main river line. I do not take into consideration any of the branch line operation at all. The branch line operation is not so favorable as the main line. I have given them the benefit of the best conditions they have.

(2319) On page 1619 I said that I would check the average distances from the Hocking territory to Akron, Ohio, which I showed as 132.8 miles, based upon Kern's study. I have rechecked those distances and I find the average distance is 177.1 miles, which changes the average from all of the southern Ohio groups to Akron to 192.2 miles.

[fol. 2238] There was another correction I wanted to make, and that was the average distance from Hocking to Lorain. I showed the average distance of 250.6, whereas the correct average (2320) distance is 228 miles, as taken from Kern's exhibit. There was an error in the Kern exhibit in showing the total miles which misled me, and so that resulted in changing the average to Lorain from the entire southern Ohio territory to 238.3 miles.

By the entire southern territory I mean Hocking, Pomeroy, Crooksville, Jackson, Ohio.

(2321) On page 1634 on the 16th line the word "Danville" should be Boonville, on page 1661, the 9th line, "modify" should have been "annul."

On page 1675 Mr. Orcutt asked a question about difference in mileage shown on Exhibit 249, and asked for the reason for the difference in distance of 165.2 miles and 136.9 miles. The difference is that Mr. Orcutt has compared Ohio No. 8 and Cambridge, and he was not comparing like things. That accounted for the difference which he could not understand.

[fol. 2239] Redirect examination.

By Mr. Ballard:

(2321) I am asked what differences there are between this case and the West Kentucky case which justified the use of a different distance formula in the two cases. The principal difference is that in this case the rates were based on the scale which was prescribed for use with (2322) short tariff route distances, whereas in the West Kentucky case we were not dealing with a mileage scale problem at all. Also in the West Kentucky case the traffic moved mostly by roundabout routes from both west Kentucky and southern Illinois.

The three routes from Brazil-Clinton and Linton-Sullivan districts to Hoopeston, Illinois, about which Mr. Hall asked me on cross-examination, are included in the exhibits in this case so far as they lie within 23130-23922 territory.

I am personally familiar with those routes. I have investigated all of them on the ground in my field investigations. From my familiarity with the terrain of these three routes, I would say that the locomotive performance figures calculated by me for those routes fairly reflect the differences in train operation. As I stated, the Monon Railroad runs through the rough Wabash Valley, whereas the Milwaukee runs over fairly level ground west of the [fol. 2240] Indiana-Illinois state line and fairly level territory east thereof in Indiana, after leaving Latta, Indiana. As an illustration, the Monon from Orleans to Bedford has 28 curves, 5 ascending (2323) grades, 4 descending grades, 7 cuts, 6 fills and 2 bridges. From Bedford to Victoria, there are 2 ascending grades and 3 descending grades, 48 curves, 26 cuts, 21 fills and 13 bridges. From Victoria to Bloomington, Ind., there are 8 cuts, 3 fills, 3 bridges and 16 curves. From Bloomington, Ind., to Ellettsville, Ind., there are 16 curves, 3 cuts, 2 fills and 2 ascending and 2 descending grades.

Referring to Mr. Gutheim's question in connection with my locomotive performance evidence in which he referred to particular tons of coal, particular cars and particular trains moving to Cleveland and Lorain or Rocky River, my formula has no regard for a ton of coal or a car of coal or a train as such. What I do is to take each operating division or train rating division and ascertain how many pounds of tractive effort are necessary to manufacture one gross ton of train weight, this being the unit which the railroad is producing. This has nothing to do with a ton of coal, but is simply a 2,000 pound unit of the weight of the train. When I am studying more than one operating divi- [fol. 2241] sion or train rating district I make an average of all of the districts studied and weighted by miles, as already explained orally and in Exhibit 324. This is exactly the way that traffic density figures on a system are averaged.

(2324) I am reminded that Mr. Webber pointed out that certain of the B. & O. routes studied by me for locomotive performance are very much longer than the short route from the particular district to the particular destination. The length of the routes studied by me for locomotive performance has no effect whatsoever on the average distances ascertained by me in my distance exhibits.

Recross-examination.

By Mr. Gutheim:

It is correct to say that the final average figure of 16.05 pounds on my exhibit 326, is the average pounds of tractive power required to haul one gross ton of car and contents of a total weight of 2,000 pounds, regardless of commodity, one mile—regardless of commodity and computed as I have described.

(2325) Taking the figure from Conway to Canton via the Pennsylvania Railroad's new cut-off, 23.98 miles, into [fol. 2242] account, regardless of the fact that if the commodity be coal, it is suggested by Mr. Gutheim that it would first have to be moved from the mines to Conway in order to go from Conway to Canton. Well, the line from Conway to Canton is part of the route studied and the figures for that route go into that average. (2326) That particular stretch is not influenced by the fact that there was a prior movement or subsequent movement, but all of the routes are shown together in the final figure and all of the sections of track are shown together in the final figure.

I am asked whether it would be the fact that if you were moving coal to Lorain and to Canton and to Orville from the Pennsylvania Railroads's Pittsburgh district mines, you would move 3 tons or 3 cars, whatever you like, from the mines to Conway in order then to move one ton or one car from Conway to Lorain, another car from Conway to Canton, and another car from Conway to Orrville. Of course up to Bayard it would all move and could all move in the same train. Up to Conway they would all move over the same line.

By Mr. Day:

(2329) I am familiar with the line of the New York Central leading northward from Danville. That line is the one which, in connection with the Lake Erie & Western at [fol. 2243] Handy, would carry New York Central Lines coal. The line of the New York Central north of Danville is an efficient line. I have not made any calculations to determine its relative efficiency as compared with the Milwaukee over that section, but it is a good line. From the standpoint of tractive effort, it may be true that the New

York Central shows up more favorably than the line of the Milwaukee. I don't recall the exact figures.

Redirect examination.

By Mr. Ballard:

(2331) I am reminded that Mr. Gutheim made the statement on re-cross examination that I had never before used this method of making an average figure for a number of operating divisions or train rating districts, that is, the locomotive performance figure. That is not true. I know of no difference between the method I used in making that average in this case and that used by me in the Eastern Bituminous Coal case. So far as I know the methods are identical, and that is true also of the Lake Cargo and the the West Kentucky case.

[fol. 2244] Recross-examination.

By Mr. Gutheim:

In the Eastern Bituminous Coal Case, I made a figure from the Clearfield district to New York tidewater transshipment piers, and also from the Clearfield district to Philadelphia transshipment piers, and from Clearfield to Baltimore transshipment piers. (2332) I made the same kind of figures from the southern fields, in each instance from the mines to the piers.

I am asked to name any other final tractive effort figures that I excluded in my computation in the Eastbound case other than a figure from the assembling point in the coal fields to final destination. I do not remember that I included any figures other than those from assembling points to destination.

[fol. 2245] (2338) In the so-called Eastbound case, known on the docket as No. 23430, my studies in that proceeding were made for the Central Pennsylvania Coal Traffic Bureau and some allied interests. In that proceeding I presented a tractive effort study covering the route of the Pennsylvania Railroad from the Clearfield district to New York for transshipment piers. I am asked whether that study was for the through route from assembling points in the coal fields to the destinations. (2339) Generally

speaking, from the base group it was a through study for the whole line.

In that proceeding I also made a study from the same Clearfield base group via the same Pennsylvania Railroad to Philadelphia transshipment piers. Not all of the haul from the Clearfield district to the Philadelphia piers, but the greater portion of it, is included in the haul from the Clearfield district via the same Pennsylvania Railroad to the New York piers. It is all except the portion in and around Philadelphia, where it branches off.

I also made a study of the tractive effort expenditure on the route of the Pennsylvania Railroad from the same Clearfield district to Baltimore transshipment piers. That also was a through route study from mines or from assembling points in the coal fields to Baltimore.

[fol. 2246] There is a part of the route from the mines in the Clearfield district (2340) to the Baltimore piers that is included in the route from the same mines via the same Pennsylvania Railroad to New York. It is the portion from the assembling points to Enola, and thence over the same line for a considerable distance, I think it branches off from that line at Columbia. It branches off the passenger route from Harrisburg to Baltimore at a distance south of Harrisburg. Up to that point it is the same route you have to New York, and also the same route you have to Philadelphia piers.

I am asked whether, after making those individual route studies from the Clearfield district via the Pennsylvania Railroad to New York and the Philadelphia and the Baltimore transshipment piers, I made any summary whatever to show the composite result via all of those routes of the Pennsylvania from the Clearfield district to all of those piers. I did not, and that is the only part of that case that varies at all from the method I followed in this case. (2341) You did not desire a composite figure. So far as the figures are compiled and introduced is concerned, my answer means that I made no such composite figure as I have made here for all Ohio or all Pittsburgh, all Connellsville or all Fairmont; but I did make a composite of all the northern routes on the one hand and all of the southern routes on the other [fol. 2247] hand, using as a basis for that composite the figures introduced by witness Davenport for the defendants. Those were also figures from the base district for the

through routes to destinations; but in that instance I did not double up and use the same section of track more than once. That was when I worked up the carriers' figures.

Redirect examination.

By Mr. Ballard:

In the Eastern Case I made one composite for the purpose of comparing one entire territory with another, and when I made that composite I did it exactly as I have done in this case, as I testified this morning. (2342) As I recall that was the last exhibit which I introduced in rebuttal of Mr. Davenport's testimony. If not the last, it is almost the last.

It is also true that in that case I did not make any composite in which I used the same operating division or train rating division more than once.

Recross-examination.

By Mr. M. Carter Hall:

I am referred to Page 1647 of this record, from which Mr. Hall read my description in answer to Mr. Ballard's question as to how my charts measured the locomotive perform-[fol. 2248] ance, to which my answer, in part, was (2343): "An average has been made for each entire route studied, showing the pounds of tractive power required to haul one ton one mile per mile of line based on the average train over the entire route and the average tractive power required to haul that train over the entire route." I stated that I had followed that same method of treating entire routes in the West Kentucky Case, the Lake Cargo Case, 1930, the Eastern Coal Case and the Illinois Intra-State Rate Case and Docket 23922.

I do not want to change that answer at all. When I was dealing with the one individual entire route I followed the same method in every instance. Up to the point where I start to draw them together I always dealt with entire routes.

(2344) I did not draw these figures together to form composite averages in the Eastern Case. I did in the Western Kentucky. I did not in 23130. I don't believe I did in 23922. I did it in this case.

I did it with Mr. Davenport's figures in the Eastern Case. Primarily, my method has been to compare entire routes from point of origin to destination, but in the West Kentucky Case I was comparing one territory with another, and there I made a composite average.

[fol. 2249] I am now asked whether, if I had compared one district with another in this case, as I did compare one territory with another in the West Kentucky Case and compiled averages over the entire routes, I would not have brought about a diametrically opposite result with respect to my comparison between Ohio and Illinois-Indiana territory than I did in this case. (2345) I can't answer that yes or no without going over the figures. I did not try to figure a composite average of the entire routes in preparation for this case, except what I have shown so far. I worked it out for each individual route first, and then combined it.

By Mr. Ballard:

(2346) I am asked whether I ever in any case made an average of entire routes which had the effect of using the same piece of railroad more than once in the average. Not that I can recall where the movement of traffic was in the same direction.

[fol. 2250] Roy S. Kern was recalled, and having been previously sworn, testified as follows:

Direct examination.

By Mr. Orcutt:

(2347) I desire first to offer some supplements to the Davis tariff. The initial reductions of the W. & L. E. Railway from its eastern Ohio districts to Canton and Massillon, Ohio, under order of the Public Utilities Commission of Ohio, in Docket 7252, Republic Steel Corporation vs. Railroads, and to Cleveland, Akron, Lorain, Huron and intermediate points under authority of the Public Utilities Commission of Ohio Special Permission No. 6492 of July 20, 1932, were made effective August 1, 1932, in Supplement No. 27-A to Davis' Ohio No. 48, which I offer as Exhibit No. 358.

(Exhibit No. 358, Witness Kern, received in evidence.)

Supplement No. 28 to Ohio 48, published effective August 1, reduced rates for account of lines serving the Massillon, Middle-Coshocton and No. 8 districts, other than the W. & L. E. Railway, to Canton and Massillon, Ohio, in pursuance of the decision and order of the Ohio Commission in Docket 7252. This supplement I offer as Exhibit No. 359.

(Exhibit No. 359, Witness Kern, received in evidence.)

[fol. 2251] (2348) It will be observed that the supplement also bears an I. C. C. number and that the reduced rates in it are published effective September 3, 1932, for interstate application. The interstate application of such was subsequently canceled and I will later introduce the tariff in which that was accomplished.

Supplement 27-B I offer as Exhibit No. 360.

(Exhibit No. 360, Witness Kern, received in evidence.)

In this the reductions of the P. & W. V. Railway from its No. 8 district to Cleveland, Akron, Lorain, Huron, and intermediate points, meeting the initial W. & L. E. Railway reductions, were effected August 12, 1932, under authority of Ohio Commission Special Permission No. 6524 of August 5, 1932.

Supplement No. 29 to Ohio No. 48, which I offer as Exhibit No. 361, published reduced rates for account of the B. & O. Railroad from the Cambridge district to Mansfield, Ohio, effective August 20, 1932, in pursuance of the decision and order of the Ohio Commission in Docket 7036.

(Exhibit No. 361, Witness Kern, received in evidence.)

This tariff also bears Supplement No. 29 to I. C. C. [fol. 2252] No. 48, but reference to Page 6 thereof will indicate that the reduced rate of $1.51 from the B. & O. Railroad Cambridge district to Mansfield is restricted to apply on Ohio (2349) intrastate traffic only, the interstate rate of $1.76 being unchanged. This supplement likewise had the effect of cancelling reduced interstate rates to Canton and Massillon, Ohio, as published in Supplement No. 28. This, namely, cancellation of the interstate application of reduced rates, was accomplished under authority of Special Permission of the Interstate Commerce Commission No. 117123 of August 10, 1932, and had the effect

of confining the reductions to Canton and Massillon to Ohio intrastate traffic only.

Supplement No. 27-C is offered as Exhibit No. 362.

(Exhibit No. 362, Witness Kern, received in evidence.)

In it the P. R. R. reduced effective August 27, 1932, under authority of Special Permission of the Ohio Commission No. 6565 of August 22, 1932, its rate from the Cambridge district to Mansfield, thereby meeting the reduction of the B. & O. Railroad as required by the Ohio Commission in Docket 7036.

I offer Supplement 27-E of Ohio No. 48 as Exhibit No. [fol. 2253] 363.

(Exhibit No. 363, Witness Kern, received in evidence.)

In it the B. & O. Railroad, P. R. R. and N. Y. C. Railroad met the reduced rates of the W. & L. E. Railway and P. & W. V. Railway to Cleveland, Huron, Lorain, Akron and intermediate points. These reductions became effective September 2, 1932, under (2350) authority of Special Permission of the Ohio Commission No. 6570 of August 30, 1932.

Supplement 27-F to Ohio No. 48 I offer as Exhibit No. 364.

(Exhibit No. 364, Witness Kern, received in evidence.)

In it certain downward revisions were made in Ohio state rates to restore competitive conditions which had prevailed prior to the reductions covered by the tariffs I have previously introduced in evidence. The important and particular reductions made in this supplement are those of the P. R. R. to Alliance, Ohio, effective September 13, 1932, under authority of Special Permission of the Ohio Commission No. 6583 of August 30, 1932. In my initial testimony in this case I called attention to the fact that rates to Alliance from origins on the N. Y. C. Railroad were reduced through operation of the long and short haul clause of the Ohio General Code, Alliance being intermediate to Canton and Massillon via certain routes involved in the reductions required by the Ohio Commission in Docket [fol. 2254] 7252.

Mr. Eldridge, in his testimony, contended that the reductions in the rates of the New York Central to Alliance was

not necessary under the decision and order of the Ohio Commission. We were initially inclined to that opinion also, but because of the doubt in that connection and (2351) also several other connections, a committee of railroad representatives conferred with Mr. Herrold, (of the Ohio Public Utilities Commission, here present) who ruled that the New York Central should reduce the rate to Alliance if it is to comply fully with the decision and order cited.

Supplement 27-G I offer as Exhibit No. 365.

(Exhibit No. 365, Witness Kern, received in evidence.)

In it the carriers complied with the decision and orders of the Ohio Commission in Docket 8072, dated September 15 and 17, 1932, and reduced, effective September 29, 1932, rates from origins on the B. & O. Railroad, P. R. R., N. Y. C. Railroad and W. & L. E. Railway in the Cambridge, Hocking and Crooksville districts to Cleveland, Lorain, Huron, Akron, Orrville, Rocky River and intermediate points by the same amounts as rates from the No. 8 district to such points had been previously reduced.

Supplement 27-H I introduce as Exhibit No. 366.

(Exhibit No. 366, Witness Kern, received in evidence.)

[fol. 2255] In this the N. Y. C. Railroad, B. & O. Railroad and P. R. R. further reduced Middle District rates to Cleveland, Ohio, from $1.28 to $1.22, thereby meeting the reductions inaugurated (2352) by the W. & L. E. Railway. It will be noted by reference to Supplement No. 27-E, which I have introduced as Exhibit No. 363, that in the first instance these railroads held their reduced rates from the Middle District to Cleveland to the Lake Cargo coal rate of $1.28 per net ton. For competitive reasons, it was subsequently found necessary to depart from this principle and establish the same rate as that of the W. & L. E. Railway, namely $1.22.

Supplement No. 27-J, which I offer as Exhibit No. 367, complied with the decision and order of the Ohio Commission in Docket 8097 of October 18, and established, effective October 28, 1932, rates from the N. Y. C. Railroad Pomeroy district mines to Cleveland, Huron, Akron, Orrville, Rocky River and intermediate points, which reflected the same

measure of reductions as were previously made in the rates from the No. 8 district to the same points of destination.

(Exhibit No. 367, Witness Kern, received in evidence.)

Where the tariff or supplement does not bear an I. C. C. number it is not officially filed with the Interstate Commerce Commission; not only not officially, but it is not in Washington in the Commission's files anywhere.

[fol. 2256] (2353) Davis Ohio No. 48 tariff is a current issue and changes are being constantly made. I introduce the supplements in which the reduced rates were inaugurated merely for the purpose of clarification in my explanation. I probably could have accomplished the same thing by taking the last couple of issues and putting in all of the rates, but I could not have done it in such a clean cut way.

Supplement No. 36-A, with respect to Ohio intrastate rates, did, I believe, cancel a lot of the 27 lettered supplements.

(2354) The last one I mentioned was 27-J. The supplement Mr. Herrold mentioned did not change any of the rates which I have alluded to in my testimony. If they changed any rates it was a minor, inconsequential affair that I didn't know anything about.

I have read the transcript of my initial testimony in this case and I desire to make one alteration in that record. On page 149 I stated that there were more mines in operation in Ohio during the 14½-month period from July 1, 1931 to September 15, 1932, than in 1929 and 1927. This statement was true as to 1927, but not 1929. By reference to Page 169 of hearing on December 13, however, it will be noted [fol. 2257] that I cited figures reported to me by the Department of Industrial Relationships, Division of Labor Statistics of the State of Ohio, indicating that there were more men employed in coal mines within the state of (2355) Ohio in 1931 than in 1929. This is the situation I had in mind when answering Mr. Herrold's question on Page 149 of the record, and while I have made no detailed check of the situation, it may be the fact that there were less producing coal mines in 1931 than in 1929, but the operations in the former year employed more men than in the latter.

I am reminded that on page 77 of the transcript of the hearing on December 12, Mr. Orcutt requested and was granted permission for me to file as a part of my Exhibit

No. 6 the decision and order of the Ohio Commission dated October 18, 1932, in Docket 8097. I have that ready for introduction at this time. I have marked the exhibit as No. 6-A in order that it may be coupled up with the original exhibit No. 6.

(Exhibit No. 6-A, Witness Kern, received in evidence.)

My attention is directed to Page 119 of the record, on Line 3, where it says "cannot be justified to Cleveland and to Toledo." The word should have been "than" to Toledo. [fol. 2258] (2356) I am reminded that at Pages 474 to 480, I was requested to furnish certain statistical information supplementary to that which I previously introduced in exhibit form. I have an exhibit which I offer as No. 368, and which I hope contains all the figures desired by counsel.

(Exhibit No. 368, Witness Kern, received in evidence.)

This exhibit, consisting of 21 pages, shows the tonnage of coal moving to the Cleveland group, Lorain and South Lorain, Canton and East Canton, Massillon, Akron group, Youngstown and the Mahoning Valley, New Castle and the Shenango Valley, and Mansfield, Ohio, for the five months June, July, August, September and October of each of the years 1929, 1930, 1931 and 1932. Each page contains the (2357) figures for one of the twenty months involved; for example, in Ohio, classified by Ohio No. 8, Cambridge, Middle, Hocking and Pomeroy, and other Ohio districts, and the total movement from all Ohio mines. Next it shows the Freeport district; next the Pittsburgh district segregated by origin lines as in the reports of the Ohio Bureau of Coal Statistics; next the Connellsville district; next the Fairmont district separated by origin lines as in the reports of the Ohio Bureau of Coal Statistics; next the shipments from the so-called southern high volatile districts, and last, the shipments from the southern low volatile districts. The [fol. 2259] grand total is shown at the bottom of the page. The movements for all other months covered are shown similarly and need not be further described.

I now have in preparation an exhibit which will treat similarly the corresponding figures for the months of November and December, 1929, 1930, 1931 and 1932.

I am asked whether this Cleveland group is not merely the several destinations that are grouped (2358) in the

Ohio Bureau of Coal Statistics reports, rather than the Cleveland rate group. It is a group of stations which you can probably call industrial Cleveland, and all of them appear in my previous statistical exhibits.

I have stated that the figures from the Pittsburgh district and the figures from the Fairmont district were segregated by railroads as shown in the Ohio Bureau of Coal Statistics reports. Those same reports segregate the tonnage of the other districts by industries and railroads. The reason for showing the originating railroads for Pittsburgh and Fairmont and not for Ohio, Freeport, Connellsville and the southern high and low volatile districts is because the transcript of the record of our discussion did not indicate that you wanted a separation as to railroads in the instance of any other districts than those I have given.

[fol. 2260] (2359) On sheet 2 of this Exhibit 368, which is typical of the remaining 19 sheets, the three roads listed, under the Fairmont district is "Monon. Railway." My abbreviation means Monongahela. The Monon is not in any of the districts treated by this exhibit.

At Page 276 of the record for December 14, 1932, I was given leave to file correction to Exhibit 33 and any other exhibits which might contain mileages from the B. & O. Railroad No. 8 and Middle Districts to Canton, Ohio, inadvertently computed through Bellaire instead of Dover and Valley Junction, the tariff route. I have prepared such corrections.

First I desire to offer an exhibit which I (2360) believe should be marked 33-A, which corrects Pages 13 and 15 of the original Exhibit 33.

(Exhibit No. 33-A, Witness Kern, received in evidence.)

They are substituted for the original pages, but it may be called Exhibit No. 33-A.

It will be observed that we have reproduced the entire pages 13 and 15 in order that they, if interested persons may desire it, can be substituted for the corresponding pages of the original exhibit. Of course, many of the figures contained upon the corrected pages are but repetitions of those in the original exhibit.

[fol. 2261] Next I offer Exhibit 34 (corrected) which reproduces the original Exhibit 34, entitled "Average Distances via all Tariff Routes, Rates per 2,000 pounds, and

Earnings per Ton per Mile on Bituminous Coal from Tariff Origins in the Ohio Districts Indicated, to Cleveland, Lorain, Huron, Canton, Massillon, Akron and Mansfield, Ohio," making such (2361) corrections as have been found necessary, particularly those contained upon Exhibit 33-A.

(Exhibit 34-A, Witness Kern, received in evidence.)

I next offer as Exhibit 35-A corrected Pages 3, 4, 10, 23 and 24, which as in the instance of Exhibit 33-A can, if desired, be substituted for the corresponding pages in the original Exhibit 35.

(Exhibit 35-A, Witness Kern, received in evidence.)

In connection with corrected Page 24 of Exhibit 35, I have noted that the average distance from active mines in the middle district on the N. Y. C. Railroad to Alliance, Ohio, is shown as 26.8 miles. This is a typographical error and should read 36.8 miles—obtained by dividing the four active miles into the total miles of 147.3 shown upon the exhibit. This correction has the effect of requiring certain changes in Page 25 of the original exhibit, namely, to Canton, Ohio, the distance via N. E. C. Railroad, Alliance and P. R. R. is shown as 45.8 miles; this should be corrected [fol. 2262] to read 55.8 miles. To Massillon via N. Y. C. Railroad, Alliance, P. R. R. the distance is shown as 53.8 miles, and should be changed to read 63.8 miles; and to Akron, the distance via N. Y. C. Railroad, Alliance, P. R. R., is shown as 69.8 miles, and should be changed to read 79.8 miles. Likewise, in the instance of these routes the average distance to (2362) Alliance of 26.8 miles as shown on Page 25 should be increased to 36.8 miles. No change is required in the figures under the caption "Total Through Miles," as they are correct as stated on Page 25 of Exhibit 35. Corresponding changes should be made in the average mileages via the same routes as shown on Pages 14 (corrected), 16 and 20 of Exhibit 36, but such however do not require changes in the average distances via all tariff routes, because the total miles, rather than the average distances, were used in the determination of such.

I desire to offer as Exhibit 36-A corrections to Pages 12, 13 and 14 of the original Exhibit 36. These, if desired, may be substituted for the corresponding pages of the original exhibit.

(Exhibit 36-A, Witness Kern, received in evidence.)

Exhibit 37 (corrected) is a reproduction of my original Exhibit 37, entitled "Distances via all Tariff Routes, Rates per 2,000 Pounds, and Earnings per ton per mile on Bitu-[fol. 2263] minous Coal from Active Mines in Ohio Districts indicated to Cleveland, Lorain, Huron, Canton, Massillon, Akron and Mansfield, Ohio." This exhibit makes all necessary corrections to the original Exhibit 37.

(Exhibit 37-A, Witness Kern, received in evidence.)

I next offer as Exhibit 38-A corrected Page 6 of the original Exhibit 38.

(2363) (Exhibit 38-A, Witness Kern, received in evidence.)

This correction was made necessary because the original distances from the Fairmont district on the B. & O. Railroad to Canton, Ohio, via B. & O. Railroad direct, were computed through East Akron rather than through Dover and Valley Junction, Ohio. This change has the effect of reducing the B. & O. Railroad Fairmont distances to Canton by from 40 to 50 miles, depending upon the points of origin. It also cuts the average distance from all origins in the Fairmont district taking rate to Canton of $1.82 from 238.8 miles to 217.7 miles; from all origins taking the $1.84 rate from 216.9 miles to 204.7 miles; and from all origins taking the $1.87 rate from 273.6 miles to 258 miles.

My next exhibit, No. 39-A, corrects Pages 27 and 29 of the original exhibit to reflect the distances from the B. & O. Railroad Fairmont District through Dover and Valley June-[fol. 2264] tion, Ohio, to Canton, Ohio.

(Exhibit 39-A, Witness Kern, received in evidence.)

Exhibit No. 40-A corrects Page 6 of Exhibit No. 40 to reflect the changes in the distances from individual active mines as set forth in Exhibit 39-A.

(Exhibit 40-A, Witness Kern, received in evidence.)

The change in the route of the B. & O. Railroad here also has the effect of reducing the Fairmont mileages to Canton considerably.

(2364) Due to the changes in the Fairmont district, mileages as contained upon my Exhibits 38-A, 39-A, and 40-A,

it is necessary that corresponding changes be made in my Exhibit No. 67, which is a statement of "Rates in cents per 2,000 pounds, Average Distances, and Earnings per Ton per Mile on Bituminous Coal from Active Mines in B. & O. R. R., P. R. R. and P. & L. E. R. R. Origin Districts indicated below to Representative Destinations," and accordingly I offer Exhibit 67-A, which effects the necessary changes in the Fairmont distances to Canton. Appropriate changes are, of course, made in the total miles and revenue per ton per mile.

(Exhibit 67-A, Witness Kern, received in evidence.)

Exhibit 68 is a statement entitled "Comparative Statement of Rates, Average Distances and Earnings per Ton per Mile on Bituminous Coal from Active Mines in B. & O. R. R., P. R. R. and P. & L. E. R. R. origin districts indicated to Representative Destinations." This exhibit, having been prepared largely from information contained on [fol. 2265] Exhibits 39 and 40, reflects the errors noted in the instance of the B. & O. Railroad Fairmont district distances to Canton, Ohio. In order that this exhibit may be made to conform with the other, I have revised and reissued it and offer the revised exhibit as Exhibit 68-A.

(Exhibit 68-A, Witness Kern, received in evidence.)

(2365) I have had Exhibits 42, 43, 44, 45 and 46 rechecked and I desire now to submit corrections in the distances contained in said exhibits from origins in the Kanawha, Kenova, Thacker, New River, Pocahontas and Tug River districts to the destinations in northeastern Ohio.

On Page 3, of Exhibit 42, I have detected an error in the instance of distances from the N. & W. Railway Kenova district to Cleveland, via Columbus and C. C. C. & St. L. Railway, which is the third route listed upon the page. The total miles of 102,203.0 is correct, but the average distance of 362 miles is incorrect, and should be changed to 330 miles. The earnings per ton per mile of 6.60 miles should be made to read 7.24 miles. I also found that from the N. & W. Railway Kenova, Thacker and Tug River districts the route to Akron via N. & W. Railway, Columbus, Ohio and P. R. R. was omitted and have therefore revised Pages 20, 21 and

22 of the original exhibit to include this route. These corrected pages I offer as Exhibit 42-A.

[fol. 2266] (Exhibit 42-A, Witness Kern, received in evidence.)

Exhibit 43, which is a statement of distances, etc., from the so-called Southern Crescent districts to destinations in northeastern Ohio, being a recapitulation of Exhibit 42 reflects the same error as last noted in connection with Exhibit 42, and accordingly I have revised and reissued Page 3 of Exhibit 43 to correct the distances and ton mile earnings to Akron, Ohio. This I offer as (2366) Exhibit 43-A. Of course, where the distances were changed corresponding corrections have been made in the earnings per ton per mile.

(Exhibit 43-A, Witness Kern, received in evidence.)

In Exhibit 44, which contains lists of active mines on railroads serving the so-called Southern districts, it has been noted that the route from the N. & W. Railway Thacker district to Akron, Ohio, via Columbus and P. R. R. was omitted. Accordingly, I have revised and reissued Page 18 of this exhibit to include that route and offer the corrected Page 18 as Exhibit 44-A.

(Exhibit 44-A, Witness Kern, received in evidence.)

Exhibit 45, which contains computations based upon the detailed information contained in Exhibit 44, reflects the omission of the route via Columbus and P. R. R. from the [fol. 2267] N. & W. Railway Thacker district to Akron, and accordingly I have revised and reissued Page 21 of Exhibit 45 to effect the inclusion of this route and offer it as my Exhibit 45-A.

(Exhibit 45-A, Witness Kern, received in evidence.)

Exhibit No. 46 is a recapitulation of the distances from the southern districts contained in Exhibits 44 and 45, and the computation of the average distances from active mines in the high volatile and low volatile southern districts via all tariff routes. It, of course, reflects (2367) the omission of the route from the Thacker district to Akron via Columbus and P. R. R. from Exhibits 44 and 45. Consequently,

I have revised and reissued Page 3 of Exhibit 46 to effect the inclusion of this route and offer it as my Exhibit 46-A.

(Exhibit 46-A, Witness Kern, received in evidence.)

At Page 161 of the transcript of testimony taken on December 13, 1932, Mr. Herrold asked me for an explanation of the reduction appearing on my Exhibit No. 41 in the rate from the Fairmont district to Mansfield, Ohio. That exhibit shows that effective March 27, 1924, the rate was reduced from $2.18 to $2.13 net ton. My response to the question was to the effect that it was probably some individual adjustment but that I did not know the exact nature of it. Since, I have examined the files of both the Coal, Coke & [fol. 2268] Iron Ore Committee and of the Pennsylvania Railroad and have ascertained that my original answer was correct. The purpose of the reduction was to equalize the rate of the P. R. R. with that published by the P. & L. E. Railroad. It is, of course, understood that both the P. R. R. and P. & L. E. Railroad serve the Fairmont district only through the Monongahela Railway and it is essential that the rates of each line be the same to all common destinations.

Recross-examination.

By Mr. Ballard:

(2368) Referring to my exhibits Nos. 38-A and 40-A, the figure 753 origins on the Pennsylvania Railroad, being the second item in the first column of figures on exhibit 38-A, represent all tariff origins, and the figure 125 represent active mines. (2369) Exhibit No. 39 also enumerates those 125 mines.

[fol. 2269] In connection with the history of the tariffs naming the reduced rates, I distinguished between intrastate rates and interstate rates covering hauls entirely within the state of Ohio, and I showed that the interstate rates either had never been reduced or, if reduced, were restored to the former basis, and all of the rates that I was speaking of were rates from a point in Ohio to a point in Ohio entirely within Ohio. The situation with respect to the Wheeling interstate rates of that character is the same as the rest of the railroads. They have two rates.

I am asked if it is not a fact that all of these Ohio lines,

including the Wheeling, have maintained phantom interstate rates between those points. (2370) I do not like that innuendo. We just have two rates, one is an interstate rate and one an intrastate rate.

I am asked whether in my experience, a shipment of coal has ever moved on any of the—what Mr. Ballard terms phantom interstate rates. (2371) I don't know, but I will say this, that if a producer of coal on the Wheeling and Lake Erie wants to ship to a team track for delivery on the New York Central at Cleveland, he would pay $1.74 or else $1.45 rate to Cleveland plus a switching rate, whatever that might be. There is no reduced rate from that mine to that delivery, but there is a rate of $1.74.

[fol. 2270] I am asked whether the reduced rates that I call an intrastate rate, and an unreduced rate between the same points for the same identical service that I call an interstate rate, I can point to any shipment that has ever moved on such interstate rate. (2372) I cannot answer the question: I do not know. The only statistics I have *is* of the Davis Ohio Bureau of Coal Statistics, and I could not tell from them. My personal knowledge does not go beyond those statistics. I would say, however, that I have seen waybills for shipments of cars which moved into a point in Illinois to another point in Illinois where they had state and interstate rates exactly as we have here today and they paid the interstate rates. (2373) We have only had this situation in Ohio since the first of August.

I don't know who would be the best person to have access to the information you request. The coal traffic officers of any of the Ohio lines would probably be able to get it, if anybody could. (2374) Some of them have testified in this case.

By Mr. Martin:

In connection with my Exhibit No. 35, I did not in my substitute Exhibit No. 35-A limit myself only to the corrections which had been called to my attention by Mr. Webber in my Exhibit 35. I said any other corrections that I had detected in the recheck of the exhibits.

[fol. 2271] (2375) It is pointed out that on page 5 of my Exhibit 35, under the column headed "Lorain, Ohio," my figure is 129.4, and that Mr. Adell testified that the exact

mathematical average should be 139.4. I should have carried that in, in connection with the error of 10 miles in the computation of the distances to Alliance. It is shown as 26.8 on Page 24 of this exhibit and I believe it should be 36.8. The distance to Lorain was not an error in total miles, it was just in the basic average miles to Alliance, so that when I unite the distance of the New York Central with some other railroad that error is automatically taken care of in my exhibit, because there I use total miles and not average miles.

By Mr. Herrold:

(2376) Referring to my Exhibit 37-A, the average distance via tariff routes from Crooksville district to Cleveland is 208.1. miles. My original exhibit No. 37 does not show the active mines. The list of active mines was contained in another exhibit. Exhibit No. 35 will show the tariff routes individually which I used in compiling this exhibit from the Crooksville district to Cleveland, at the rate of $1.60. I am aware of the fact that there are different rates from the Crooksville district to Cleveland. While there is an actual rate of $1.47 over the P. R. R. direct and a rate of $1.47 over the Wheeling & Lake Erie, I have shown only the $1.60 rate. In selecting the $1.60 rate [fol. 2272] (2377) I selected only the route over which the $1.60 rate was applicable. In this exhibit I did not take into consideration the shorter route over which a different rate applies. The $1.60 rate applies from B. & O. origins via B. & O. direct, also from P. R. R. origins tariff route shows via Cleveland and Big Four. Those are the only two routes.

From the Pomeroy district I show 302.2 as my average mileage from active mines of the Pomeroy district to Cleveland, and a rate of $1.60.

(2378) My exhibit No. 35 shows the active mines. Those are only the mines on the New York Central Railroad. The tariff routes that are used in arriving at those average distances are via Columbus and P. R. R. That is the only one.

From the Hocking District to Huron, in arriving at the average mileage of 261.8 at a rate of $1.70, the route used was via Centerburg and P. R. R., New York Central. That

would be via New York Central and Centerburg, Pennsylvania to Cleveland, and thence New York Central to Huron. From the Pomeroy district it would be via Columbus, P. R. R. Cleveland and New York Central. (2379) That was the only route there. It was a constructive route made to conform to the Ohio Commission's decision.

[fol. 2273] It is asserted that from the Crooksville district to Cleveland they originally had a rate published from the mines on the New York Central of $1.89 and that in accordance with the order of the Ohio Commission in docket 8072 that rate should have been reduced to $1.60 from mines on the New York Central Railroad to Cleveland. I am asked where it was reduced, and if so, in what tariff supplement. Our records do not show that it was reduced.

On the rate that was in effect prior to the issuance of the order, we had a route via Zanesville, Wheeling and Lake Erie to Cleveland and the rate was $1.89. The New York Central did not reduce the rate over that route, $1.89 down to $1.60, in consequence of the order in docket 8072. (2380) I do not know why.

[fol. 2274] A. S. Boden was recalled, and having been previously sworn, testified as follows:

Direct examination.

By Mr. Gutheim:

(2380) I was asked by Mr. Martin to give some additional distances. My exhibit No. 369 is headed "Statement of Average Distances via all Tariff Routes from Southern Coal Fields to Southern Ohio cities, Supplemental to Exhibit No. 106."

(Exhibit No. 369, Witness Boden, received in evidence.)

This separates Lorain, Massillon and Painesville, Ohio showing the average distances via all tariff routes to each from mining points in the southern groups. The testimony offered in connection with Exhibit No. 106 is equally true as to this Exhibit No. 369.

(2381) I have made an investigation of the trend of the

movements to the Ohio destinations that are here principally involved before and since the Ohio reduced rates took effect.

The first exhibit is headed "Statement Showing The Tonnage Shipped to Northeastern Ohio Cities for Months of June to October, Inclusive, 1932."

Considerable has been said as to the trend of tonnages since the reduced rates became effective. I have taken the tonnage figures shown by the Ohio Bureau of Coal Statistics for the two months prior to August and the two months since August, as well as those for the month of August, for the years 1931 and 1932 to indicate what the movement and the trend has been from the various districts and territories. On Exhibit No. 370 there is shown what the total shipments for the months of June to October have been for the year 1932 from the origins indicated in the left hand side of the exhibit.

(Exhibit 370, Witness Boden, received in evidence.)

[fol. 2275] For instance, taking the month of June, the Pittsburgh district shipped to these five destinations some 40,943 tons. The succeeding months show some fluctuations, and in October the shipments were but 31,363 tons. From Ohio No. 8 it will be noted that in June they shipped 38,600 tons, while for each of the following months shows there (2382) was a steady increase, until in October they reached 215,344 tons.

The shipments from the south via each of the lines shown may be read in the same manner as was done for Pittsburgh and Ohio No. 8.

Under the last column there is shown what the percentage was of each of the months, using June for the base. It will be seen that from Pittsburgh the percentage for each of the months since June has been steadily downward, and as to August, it was rather a sharp drop.

From Ohio No. 8, however, as will be noted, the increases for each of the months from July to October have been large, and in October they were 457 per cent greater than in June. This increase in tonnage is also true as to the south, the more noticeable increase being from the C. & O. and L. & N. Railways. From the C. & O. the October shipments were 413 per cent greater than in June; while from

the L. & N. the shipments were 760 per cent greater than June.

[fol. 2276] In contrast to these increases, we find that Pittsburgh suffered a loss of 23 per cent. The tonnages shown from the Pittsburgh district are those of steam and domestic, separated by carriers as was shown on Page 4 of Exhibit No. 99.

Taking the year 1931 for the purpose of comparison as to the relative situation from each of the same origin (2383) groups as shown by my Exhibit No. 370, I show on Exhibit No. 371 what the shipments were for each of the months of June to October.

(Exhibit 371, Witness Boden, received in evidence.)

While the actual tonnage in 1931 was greater than in 1932 in most cases, it will be noted that the percentage of July, August, September and October show a somewhat different picture in 1931 with that of 1932.

For example, from the Pittsburgh district the drop in August and September was very slight in 1931, and in October there was an increase of 29 per cent as against June. In 1932, however, Pittsburgh dropped 23 per cent in October as compared with June.

From Ohio No. 8 the months of July to September in 1931 show a decline in shipments, and in October they shipped 3 per cent greater tonnage than June. Contrast with this the steady increases in 1932 until they reached the month of October when they shipped 457 per cent greater tonnage than in June.

[fol. 2277] The same illustrations will cover each of the other groups.

The Pittsburgh tonnages shown are those of steam and domestic coal which I have separated, the same as was explained for Exhibit No. 370.

Witness Petersen, on his Exhibit No. 126, indicated by a (2384) map what is purported to be the boundaries of the Fairmont district, and he further subdivided this district into certain sub-groups such as Fairmont No. 1 and No. 2—Short Line, Mononga and Clarksburg. In addition thereto, he shows certain boundaries of the Upshur-Belington-Junior and Roaring Creek groups. This Exhibit No. 126 showing the Fairmont district is only partially correct.

On my Exhibit 372 I have taken this same map and su-

perimposed on it, in heavy black lines, the correct boundaries of the Fairmont district. I have shown by heavy broken lines the border of the group as shown by Witness Petersen.

(Exhibit 372, Witness Boden, received in evidence.)

For example, on Exhibit No. 126, Witness Petersen shows the Fairmont district as not including the Scotts Run Branch which operates from the main line of the Monongahela Railway up to the point shown as Brave, Pennsylvania, nor the line of the B. & O. Railway from the [fol. 2278] Pennsylvania state line to Morgantown. On his Exhibit No. 126 he also shows the Fairmont district ending and the Upshur district beginning at a point just below Clarksburg, West Virginia, when, as a matter of fact, the Fairmont districts extends to a point just north of Weston, West Virginia, as shown by my Exhibit No. 372. Witness Petersen has also failed to include in his map the Opekiska district, which is that (2385) part of the B. & O. Railway extending from Morgantown, West Virginia, north to the state line with Pennsylvania.

It will be noted from my Exhibit No. 372 that the Fairmont district as shown by Witness Petersen's Exhibit No. 126 does not include all of the territory which is generally known as the Fairmont district, in so far as rates to C. F. A. and northeastern territories are concerned.

Exhibit No. 373 is a statement which shows the rates from all of the sub-districts outlined on Exhibit No. 126 as the Fairmont group.

(Exhibit 373, Witness Boden, received in evidence.)

This exhibit shows the rate to various northeastern Ohio cities involved in these complaints. It will be noted that to the nearby border points of Youngstown and Canton the rates from these sub-districts differ somewhat.

At Akron and Mansfield the rates from Fairmont No. 2, which is the mines on the Monongahela Railway, and also [fol. 2279] those in which the complaint in Docket No. 25656 are involved, are higher than from the balance of these sub-districts. To points west and north of Mansfield, the rates from all of these districts are the same.

I would like to call attention to one other situation not readily apparent from these figures. It will be seen (2386) that to Youngstown the rates from Fairmont No. 2 and

No. 1 as well as from the Opekiska districts are lower than from the other districts. This is true because the movement is northbound through the Connellsville and Pittsburg districts.

To Akron, Massillon and Mansfield the rates from the northern part of the Fairmont group are higher than from the southern part. This is due to the fact that to these cities, which are B. & O. destinations, the movement is through Wheeling, West Virginia.

On this exhibit I have included all the mines on the Monongahela Railway as the rates are published. It is included in what I have called Fairmont No. 2 as shown on this exhibit.

I have checked up the relation of Pittsburgh and Freeport rates to western territory, as shown by Witness Eldridge, in his exhibit No. 131.

In that exhibit he purported to (2387) show that to C. F. A. territory the Freeport district generally enjoyed [fol. 2280] a lower rate than that from the Pittsburgh district. To points in nearby territory in northern Pennsylvania and northwestern New York State, that is, to destinations in Buffalo-Rochester adjustment of rates, the Freeport rate is less than the Pittsburgh rate. But to C. F. A. Territory that is emphatically not the fact.

On Sheet 1 of Exhibit No. 131, there is shown what are supposed to be the Pittsburgh rates when as a matter of fact they are the rates, not from the Pittsburgh district, but from B. & L. E. mines only. On my exhibit No. 374 I show that, beginning with the C. & N. W. points in Illinois, as shown on Exhibit No. 131, the rate from the Pittsburgh district is generally lower than from Freeport.

(Exhibit 374, Witness Boden, received in evidence.)

Under the third column of this Exhibit No. 374, there is shown the rates used in Exhibit 131 purporting to be the Pittsburgh rates, while under the last column I show the correct Pittsburgh rate. It is quite apparent that if the proper Pittsburgh rate had been used, the number of cities where the rate from the Freeport district is lower than from the Pittsburgh district, would be very few in number. As a matter of fact, most of the cities in Illinois shown on Exhibit 131 are either in the Chicago switching district or close to Chicago.

[fol. 2281] (2388) To illustrate, from my Exhibit No. 374, it will be seen that to Geneva, Illinois, the first city shown, the Freeport rate is $3.79, while from the supposed Pittsburgh district on Exhibit No. 131, Witness Eldridge shows the rate to be $3.89, but that is only the Bessemer & Lake Erie rate. The correct rate from the Pittsburgh being $3.66. In other words, instead of the Pittsburgh district having a 10 cent higher rate than Freeport, it actually enjoys a rate of 13 cents less. This same illustration is true with respect to each of these cities shown on this exhibit.

On Exhibit No. 375, I have shown the general territory in which the rates from the Freeport and Pittsburgh districts are the same.

(Exhibit 375, Witness Boden, received in evidence.)

For example, to Akron, Cleveland, Toledo and Sandusky, Ohio, and all points grouped therewith; as well as to all points in the state of Michigan and to the greater portion of Indiana, the rates are identical from these two origin districts.

Had we undertaken to show each of the cities separately as did Witness Eldridge in his Exhibit No. 131, we would have a voluminous exhibit. We have shown by my Exhibit No. 375 only the rate groups and a reference to the districts [fol. 2282] here shown will prove the fact to be that, generally speaking (2389), the Pittsburgh-Freeport districts have the same rail rate to CFA Territory.

I have also checked up the distances referred to by Witness Eldridge from the Freeport district to Youngstown and compared therewith the distances from the Pittsburgh district to Youngstown to show the extent to which the Pittsburgh district is as near or nearer than Freeport to Youngstown.

On Exhibit No. 133 Witness Eldridge indicated the distances from the Freeport district to Youngstown, Ohio. He apparently advocates that Freeport, because of its short tariff route average of 83 miles, be given a lower rate than Pittsburgh, whose average distance via all tariff routes has been shown to be 99 miles.

It should be remembered that this 99 mile average is the average via all tariff routes, while Witness Eldrige's 83 miles is via the short tariff route.

In the entire Freeport district there are but 10 mines, their short tariff routes to Youngstown ranging from 75 to 95 miles, with an average of 83 miles (Exhibit 133). In my Exhibit No. 376 I have shown the production of those 10 mines separated as between captive and commercial mines.

(Exhibit 376, Witness Boden, received in evidence.)

[fol. 2283] It will be noted that they produced 3,079,937 tons in 1931, and greater tonnages were produced in 1929 and 1930, (2390) as indicated on this exhibit.

On my next exhibit, No. 377, consisting of three pages, I have shown the mines in the Pittsburgh district where the distances are 94 miles and under, to Youngstown, Ohio.

(Exhibit 377, Witness Boden, received in evidence.)

On Page 3 there is a summary showing 76 mines in the Pittsburgh district having a distance not in excess of the 95 miles which is the maximum distance shown on Eldridge Exhibit No. 133 for the short tariff route. That is from the Freeport district.

The average distance from these 76 mines in the Pittsburgh district to Youngstown is just 83 miles.

This is the same as the average of the short tariff route from the Freeport mines.

As shown by my next preceding Exhibit No. 376, the production of these Freeport mines in 1931 was approximately 3,000,000 tons. From the 76 mines in the Pittsburgh district, none of which is further from Youngstown than the farthest Freeport mine, and which have the same average short tariff distance as does the Freeport group, the production in 1931 was as shown on Sheet 3, 15,500,000 tons or about five times as great as the Freeport tonnage.

[fol. 2284] (2391) I have made a segregation of the production of mines in Pittsburgh, Connellsville and Freeport so as to show the extent to which they are dependent entirely upon rail outlet.

On my Exhibit No. 378 I show on the first page the total number of mines in Pittsburgh, Connellsville and Freeport shipping coal via rail, rail and river and via river only, for the year 1929.

(Exhibit 378, Witness Boden, received in evidence.)

There is also shown the production of such mines as sepa-

rated, with the percentage of what the production is of the total. For example, there are 250 mines which can use railroads only, which is 87 per cent of the total of 298 mines shown using either rail or river. These 259 mines produced 59,514,684 tons of coal, or 70 per cent of the total of the production of the three districts, 85,555,015 tons indicated here.

On Sheet 2 of this exhibit, I have broken down the composite figures shown on Sheet 1, from each of these three districts separately. On Sheet 1 you will note there are seven mines equipped with river tipples only. It will be seen from Sheet 2 that these seven river tipple mines are all in the Connellsville district.

I would like to call attention to another fact as indicated on Sheet 2 with respect to the percentage of production (2392) of rail coal. From the Pittsburgh district the mines [fol. 2285] having only rail facilities for shipment produce 88 per cent of the tonnage, and from the Freeport district 100 per cent is handled through rail tipples only. From these figures it will be seen that the shippers in the Pittsburgh and Freeport districts producing by far the greater portion of the tonnage, are those whose mines are strictly rail tipples only, and cannot avail themselves of river and rail service and rates.

Exhibit No. 379 is the same information for the year 1930.

(Exhibit 379, Witness Boden, received in evidence.)

Attention is called to the percentage of production of the all-rail mines vs. those of the rail and river only mines.

In 1929 the percentage of all three districts was 88 per cent. It was the same in 1930, so those percentages may be termed as the general per cent of all-rail compared with the rail-river only production.

This classification is to show the location of the mines and the facilities of mines in the three districts. On page 2 of my Exhibit No. 379, Pittsburgh rail and river production, tonnage, 4,782,687, this is the total production of mines that have both rail and river outlets. (2393) It might have gone all by rail or it might have gone all by river, so far as this figure is concerned.

[fol. 2286] Exhibit No. 380 is the same showing and information for the year 1931 as has been illustrated for the years 1929 and 1930.

(Exhibit 380, Witness Boden, received in evidence.)

With respect to all these figures, there is no information available to me which would disclose what they ship by rail and what by river.

Exhibit No. 225, Witness Petersen, shows certain tractive effort studies which are intended to prove that the expenditure of tractive effort from mines in the Fairmont (2394) group are not materially different than the Pittsburgh district. On sheet 3 of his Exhibit No. 225 there is shown the details used in determining the amount of expenditure shown by Sheets 1 and 2. It will be noted from Sheet 3 that these studies begin from Maidsville, West Virginia, and north through Brownsville Junction in connection with the P. R. R. and P. & L. E. Railroads only.

No showing has been made as to the routes via the B. & O. Railway.

I would like to call attention to the fact that from this Exhibit No. 225 there is no showing whatever as to what the tractive effort expenditure is from any of the mines of the complainants in Docket 25656. The studies shown are from Maidsville, West Virginia, and this city is 4.8 miles from the Pennsylvania-West Virginia state line and about 1.5 miles north of the junction of the Monongahela Railway Main line and its Scotts Run Branch.

[fol. 2287] There is no showing of the tractive effort expenditure for any mines south of Maidsville, West Virginia, and that is the territory in which the New England Fuel and Transportaiton Company has its mines, and is the Fairmont district.

(2395) I have made a study of Witness Ackerman's distances from mines in the Cambridge District to the five Ohio cities covered in his Exhibit No. 246.

On my Exhibit No. 381, consisting of two pages, I show the correct short tariff route distances from mines in the Cambridge district to the five cities used by Witness Ackerman in his Exhibit No. 246.

(Exhibit 381, Witness Boden, received in evidence.)

The routes used from the Cambridge district on Exhibit No. 246 are not via any tariff route. This Exhibit No. 381 shows what the short tariff route distances are from all mines in the Cambridge district; what the short tariff route averages are from the specific 15 mines used on Exhibit No.

246, and also, what the "manufactured" distances are from these 15 mines as shown by Witness Ackerman.

For example, to Akron, Ohio, the short tariff route from all mines on the B. & O. is via Zanesville, W. & L. E., Mogadore, A. C. & Y. There are 31 mines with an average distance of 148 miles. Taking the 7 mines used by Witness Ackerman on Exhibit No. 246, the average short tariff route is 151 miles; while Witness Ackerman's shortest multiple route not an actual tariff route, is shown as 106 miles. (2396) [fol. 2288] From the 11 mines on the P. R. R. the short tariff route is 112 miles; from the 8 mines used by Witness Ackerman the distance is 103 miles, while on Exhibit No. 246, he shows them to be 105 miles.

Taking the total of all the 42 mines on the B. & O. and P. R. R., the average short tariff route distance is 139 miles; from the 15 mines used by Witness Ackerman they average 125 miles, but on Exhibit No. 246, the shortest route is shown as 106 miles to Akron.

On Exhibit No. 246 all of the mines in the Cambridge district were not used, neither was the shortest tariff route used. Had the shortest tariff routes from all mines been used, as this witness did with respect to the Pittsburgh district, the result would have been as indicated under the fifth column of this exhibit. In other words, the shortest tariff route distance from all mines to Akron would have been 139 miles and not 106 miles as shown on Exhibit No. 246.

At Cleveland, the correct short tariff route would have been 195 miles and not 140 miles as shown by Witness Ackerman.

The correct short tariff route distances to all other points on this exhibit may be ascertained in the same manner as illustrated to Akron.

One other feature to be noted here, is that the short (2397) tariff route from the same 8 P. R. R. mines used by Witness Ackerman on Exhibit No. 246 is shorter than his shortest [fol. 2289] actual route. For instance, at Akron he shows the shortest actual route to be 105 miles, while the correct short tariff route is 103 miles. The same is true at Canton.

In this and other instances Witness Ackerman has not shown comparable figures from all origins. For instance, he has shown the shortest tariff routes from part of the Ohio districts in some cases, and shortest possible routes not in tariffs in other cases; while from his competitors' district,

such as Pittsburgh, he has certain selected mines via certain routes which he claims as short tariffs, but which we have shown is not the correct short tariff. I have also checked out Mr. Ackerman's distances from Montour Railroad mines in the Pittsburgh district. In Exhibit No. 274, Witness Ackerman purported to show the shortest tariff route from the mines on the Montour Railroad to points in northeastern Ohio. The only trunk line connections he used with the Montour was the P. & W. V., W. & L. E. and Nickle Plate—as a matter of fact, except for shipments to Massillon, the route via P. & W. V. is not the shortest tariff route.

I have taken the same origin mines used by Witness Ackerman in Exhibit No. 274 and in addition have added the Moon (2398) Run Branch on the Montour which he failed to show; and on my two page Exhibit No. 382 there is shown [fol. 2290] the correct short tariff routes from these Montour mines.

(Exhibit 382, Witness Boden, received in evidence.)

It will be noted that the routes via the P. & L. E. or P. R. R. are materially shorter than the routes used in Exhibit No. 274.

Taking Cleveland as an illustration, you will note that the shortest tariff route is 138 miles via the P. & L. E. through Youngstown. This distance is made up as follows: The average distance to the junction point is 5.5 miles from the Moon Run Branch and 17.4 miles from the other mines. This is shown in detail on page 2 of this exhibit. I have added to those figures the distance of 122.5 miles from Groveton, Pennsylvania, via the P. & L. E., Youngstown and the Erie Railroad in the first instance, and 121.4 miles from Montour Junction via the P. & L. E. and Erie routes through Youngstown, in the second instance, these routes being indicated by figures shown under the column headed, "Route."

It will be noted that from the same Montour mines used on Exhibit 274 the actual shortest tariff route to Cleveland is 139 miles, and including the Moon Run Branch, the average is 138 miles, and not 170 miles as used by Witness Ackerman. [fol. 2291] This same illustration can be used to determine the mileages via the shortest tariff routes to the other cities shown (2399).

Sheet 2 of this exhibit shows in detail how the distances used on Sheet 1 were determined.

I have made an investigation of the production of the Monongahela Railway so as to indicate what the production is on the main line and what at the branch line mines.

My next exhibit, No. 383, is headed "Statement Showing Production of Mines on the Monongahela Railway in 1930 and 1931, Separated as Between Mines Located on the Mine Line and Those Located on Branch Lines."

(Exhibit 383, Witness Boden, received in evidence.)

This exhibit shows on the first page the name of the mines, the nearest station and the tonnage productions of each of these mines for the years 1930 and 1931. At the bottom of the sheet there is indicated the total for each of these years. On Sheet 2 the same information from mines located on the branch lines of the Monongahela Railway is shown for the same years, and at the bottom the totals for those years are indicated. It should be noted that the [fol. 2292] branch line production is considerably greater than the main line production.

(2400) I have made a re-computation of various districts which have been made a matter of record here for the purpose of showing what the situation would be on a comparison via short tariff routes from all mining districts in Pittsburgh, Freeport, Ohio No. 8 and Cambridge to the principal destinations cities here involved.

(Exhibit 384, Witness Boden, received in evidence.)

On my exhibit 384, consisting of 19 pages, I show the short tariff route distances from each of the origin districts indicated on the title page to each of the destinations indicated on the same page. For instance, on Sheet 1 there is indicated the shortest tariff route from the Pittsburgh district to Cleveland, Ohio; from the origin railroads in the Pittsburgh district showing under the third column the shortest tariff route and under the next column the number of mines; the next column showing the total mileage and the next column the average mileage. Under Column 3 on the right hand side of the page there is indicated the total number of mine routes used from the Pittsburgh districts, which showed that for 452 mines the total mileages are 74,917 and the average miles from the district to Cleveland being 166 miles.

[fol. 2293] From the Freeport district the same informa-

tion is indicated, while at the bottom of this page there is shown the total number of mines, the mileages and the average distance from the Pittsburgh and the Freeport districts combined to Cleveland (2401).

On the second page the same sort of information from the Ohio No. 8 and the Cambridge districts; separately and combined. It will be noted from the second page that the average distance from Ohio No. 8 and Cambridge combined to Cleveland is 147 miles, and from the Pittsburgh district, 166 miles.

The explanation I have given for pages 1 and 2 is sufficient for the other pages of the exhibit. They can all be read in the same manner. I may say that where I refer to an Eldridge exhibit or a Kern exhibit, the mileages have been taken from those exhibits. For example, when I refer to Boden's Exhibit No. 124, the distances and the mines taken from that exhibit are from those shown in the tariff referred to on Exhibit No. 124.

I am asked to explain what I mean by "mining points" as used on Exhibit 384. I mean all mining points (2402) shown in the exhibit from which they were referred here, or if they are referring to my Exhibit 124, all mining points shown in the tariff. Where I use mining points, I mean [fol. 2294] the mine itself where there is any difference whatever shown between the station at which the mine is located and the mine itself.

The rule I use for the disposition of fractions is anything under or over a half. That is, when it is a half I take the next whole mileage. I do not do that with the individual figures. The fractions are disposed of at the final result only. For example on page 1 of Exhibit 384, the first figure in the column headed "Average Miles" is a whole figure, 188. I have disposed of the fraction there (2403) but in the total average that has nothing to do with the figures in the total. In other words if you take the total number of mines, which is 452, you get the 74,917 total miles. The result of that is 165.9, which makes it 166 miles. That has nothing to do with the individual figures under the other column. In extending our mileage horizontally we disposed of fractions in each individual case, but the total of 166-mile average is not a disposition of fractions in each of these indiviudal cases at all. It is not true that when we got our total of 74,917 there were a lot

of individual fractions included in it. (2404) We disposed of the fractions in each individual case there, but we did not dispose of them to arrive at the 74,917 miles. That is not a computation from the preceding mileage column. It is the computation including the fractions of all of those others that we disposed of prior to that. You probably would not get exactly the same figure from anything on that sheet. We are not criticizing what Mr. Ackerman did [fol. 2295] in this exhibit. We are intending to show in our exhibit the shortest tariff routes from all districts and all of these Ohio destinations in one exhibit which has never been done in the case before.

(2405) Mr. Petersen showed some figures of financial results on the Montour and Monongahela Railways comparatively and the operating ratios of those two lines. In that connection I have assembled from the Commission's statistics of railways in the United States, first the car ownership, the freight car ownership of those two railroads. That would be my Exhibit No. 385 headed, "Statement Showing the Ownership of Freight Train Cars of the Montour Railroad and the Monongahela Railway."

(Exhibit 385, Witness Boden, received in evidence.)

This exhibit shows the ownership of freight train cars of the Montour Railroad and the Monongahela Railway and it takes the years 1926 to 1931, inclusive.

I have also made a comparison of the mileage operated and the operating ratios of those two railroads. That is shown on my Exhibit No. 386 which is headed "Statement Showing the Average Miles Operated, and Reported Operating Ratio, of the Montour Railroad and Monongahela Railway."

[fol. 2296] (2406) (Exhibit No. 386, Witness Boden, received in evidence.)

This exhibit shows for the years 1926-1931, inclusive, the average miles operated by the Monongahela and Montour Railroads, as well as the reported operating ratios for the same period of time.

I have also assembled the net railway operating income, the freight train car expense items for repairs, depreciation and retirement and the hire of freight cars balance. That is Exhibit No. 387, headed, "Statement Showing the

Net Railway Operating Income; Freight Train Cars Repairs, Depreciation and Retirement, and the Hire of Freight Cars Balance, for the Montour Railroad and Monongahela Railway."

(Exhibit No. 387, Witness Boden, received in evidence.)

[fol. 2297] TESTIMONY TAKEN AT COLUMBUS, OHIO, FEBRUARY 9, 1933

Direct examination of A. S. Boden (continued):

(2407) I have examined my working sheets on the matter of the disposition of fractions involved in the computation of mileages shown on my Exhibit No. 384. Mr. Ballard yesterday asked a question as to the disposition of fractions and was speaking particularly of page 1 of my exhibit No. 384. My answer to him was that the total figure of 74,917 miles included fractions. I would like to read the figures including the fractions on this page, so that they may be totaled, in support of my answer to Mr. Ballard. For instance, on this Sheet 1 the (2408) B. & O. route direct as indicated under the column of mileage of 3,390, should read 3,390.4. The next figure is 893, and should read 892.7. The next figures that are totaled reading 2,627 should be corrected to 2,626.9. The next total of 59,695 should be 59,695.0; the next figure, 273.2; the next figure 5,366.7; the next two figures, total 2,320, should read 2,320.1. The next and last figure in the Pittsburgh district should read 351.7. The total of those figures, includ-
[fol. 2298] ing ton miles being 74,916.7, and in the disposition of fractions I have shown them as 74,917.

These various fractions in the column headed "Mileage" result from the application of the fractional mileage wherever it exists from the mining points by the number of mining points.

With respect to Mr. Ackerman's exhibit, it is not a fact that the only B. & O. mines in the Pittsburgh district are located on the Glenwood-Elm Grove line. There are other mines between Glenwood and Connellsville on the B. & O. and there are one or two north of Glenwood. (2409) The bulk of the production on the Glenwood-Elm Grove line is on the Pan Handle line of the B. & O., that is in the Pan

Handle of West Virginia and in that section of the Pittsburgh district.

In connection with what I showed on locomotive tractive effort exhibits, Mr. Hall asked me why I did not make a computation of the Wheeling & Lake Erie's results to Huron. In my tractive effort studies shown on my Exhibit 101, I showed the tractive effort to Cleveland and Lorain, and with that put in in the Lake Cargo Case. There were no tractive effort figures of the Wheeling & Lake Erie to either of those cities, and therefore I had no showing as [fol. 2299] to Wheeling & Lake Erie tractive effort, because we have made no computation of tractive effort to Huron.

(2410) The nearest originating lines in the Pittsburgh district, with respect to the destinations in northeastern Ohio, are the P. C. & Y., the Pittsburgh & West Virginia and the Montour. With respect to the relative production of bituminous coal on those three lines, and how they compare with the production on the Wheeling & Lake Erie in Ohio, I do not have the figures for the P. C. & Y. nor the P. & W. V. The figures for the year 1931 for the Montour Railroad are 5,518,942 tons. For the Wheeling & Lake Erie, 2,784,401 tons. I would say that there are not in excess of two mines operating on the P. C. & Y. location today. As to the situation on the P. & W. V. with respect to the number of Pittsburgh district mines, I don't know the exact number, but there are not as many in operation as on the Montour.

Cross-examination.

By Mr. Martin:

(2411) With reference to my Exhibit No. 370, in selecting June for the 1932 tonnage we did not select it particularly as to whether it was a fair base month. It was [fol. 2300] two months prior to August and two months after August that we had in mind in showing what the trend was, both those months as compared with the other districts. We did not have particularly in mind as to whether the month we took was a fair base month to all the districts selected for comparative purposes.

(2412) I will admit that there were some labor troubles in Ohio No. 8 in June, 1932. In fact, I think it is true

that there was a general strike in that district still prevailing in that month. I don't know of any strikes in any of the other districts shown on my Exhibit 370 in that month. Nor do I know of any strikes in those districts in my Exhibit No. 371 for the corresponding period of 1931. [fol. 2301] I am asked whether I have the corresponding figures for the first five months of 1931 and 1932 in order to make a comparison with some months prior to the strike period of 1932. I do not have the figures with me. I think they are available for the year from the Ohio Bureau of Coal Statistics.

(2414) My Pittsburgh figures shown on Exhibits 370 and 371 are not total Pittsburgh figures; they are the figures for steam and domestic coal, as I divide it on my exhibit 99. That is a division through allocation by railroad lines west of Pittsburgh on the one hand and east on the other hand.

It is pointed out that in connection with those exhibits in some of my mileage comparisons I use the Cambridge district for district comparisons. I am asked whether I made any effort to ascertain the tonnages from the Cambridge district to Akron, Canton, Cleveland, Lorain, Massillon, by months for the period June to October, 1931, and 1932. I did not make any investigation of them (2415), but I think the tonnages are lesser than the No. 8 tonnages, a lesser figure. I do not know anything about the trend of the tonnages during that period.

It is true that rates on ex-river coal from Conway to Colona and from points on the Wheeling and Lake Erie river division went into effect about the middle of July, [fol. 2302] 1932, but I don't understand that they moved any business. I cannot state that as a fact of my own personal knowledge. There was that rate change, in the middle of July, 1932 (2416), which did not obtain at any date prior to that.

By Mr. Keeler:

Concerning my exhibit 372, I stated on direct that I had reworked this map because witness Petersen had not correctly shown the outlines of the groups in the district in northern West Virginia.

The rates from the Fairmont No. 2 district on the Scotts Run Railroad extend just out of the state line. As to

the last station that takes the district rates, I would have to consult the tariff. (2417) It is either at Cassville or just north of it. I do not know how far Cassville is from the main line of the Monongahela railway.

I am shown a map of the Monongahela Railway and am asked to state approximately how far from the main line in relation to the distance to the Pennsylvania-West Virginia line the station of Cassville is located. It is approximately one-third of the way. My map shows straight lines and does not show curvature of the map that you show. Therefore we cannot take exactly one-third of the way. (2418) It is not my contention that in drawing these lines I have them correctly drawn on the map.

I cannot answer as to whether there is any production of coal beyond Cassville without checking up the reports. If there are any mines beyond Cassville, they take a higher rate than Fairmont No. 2, to some destinations.

[fol. 2303] (2419) The heavy dark lines on the map from Grafton over to Weston is the southern boundary of the Fairmont district, and does not differ in any respect than part of yours, only you stop a little bit up towards Clarksburg rather than extending down to the end of the Fairmont district.

[fol. 2304] Your Pennsylvania tariff and your B. & O. tariff designates a Fairmont district, as distinguished from the individual group. (2420) You have a Fairmont district No. 1 and a Fairmont district No. 2, so designated. You also have these others that you show there of Short Line, Mononga and Clarksburg. I stated that that is what is known as Fairmont district rate to C. F. A. Territory generally, and that is correct, they are the same rates only some tariffs designate them as Short Line and Mononga and others designate them as Fairmont No. 1 and Fairmont No. 2.

South of the line I show here extending from Grafton to Weston is generally known as the Belington district. As to the tariff designation to which I can refer for authority for that designation of the Belington group, I offer the same explanation as I made for Fairmont.

(2421) I have referred to the area north of the line from Grafton to Weston as being in the Fairmont district because those groups up there take the same rates. The groups below the line also take that rate from the Fairmont

No. 1 and Fairmont No. 2 districts in a good many instances to this territory, that is, speaking of what is known there as the Upshur, Belington and Roaring Creek, to C. F. A.

General knowledge is the basis for the designation of this northern section of the group as the Fairmont District and the southern end of it as the Belington District.

[fol. 2305] I distinguish C. F. A. territory as something that would be different than these nearby Ohio-Pennsylvania towns.

I am asked whether it is not a fact that to this northeastern Ohio territory, the area south of the line from Grafton to Weston (2422) takes the same rates as the area north to a majority of the destinations. For example, Cleveland and Lorain. They do not take any different rate.

In connection with my Exhibit 373, I am asked if there was any object in stopping the presentation as set forth on that exhibit to the Clarksburg district (2423). I think in my statement as to what this covered I said it was the subdistrict in what we generally term as the Fairmont group to Central Freight Association Territory. It is true that I have stated that districts below the Clarksburg district take the same basis of rates to these northeastern points, at least some of them.

I am asked whether it was not my thought in presenting Exhibit No. 377, that mines in the Pittsburgh district, that, via the short tariff route, are within the maximum distances from the Freeport district, should take rates no higher than Freeport. In my direct testimony I stated that at the outset we were not attempting to separate any Freeport Pittsburgh district. The figures show that we have 76 mines in [fol. 2306] the Pittsburgh district (2424) that are lower, distance considered, than any of the mines in the Freeport district whose maximum distance is 95 miles to Youngstown. We contend that the Freeport district should be continued as it now is.

I am asked concerning the specific object of this exhibit, whether in my judgment, these mines within the Pittsburgh district that are within the maximum distances from the Freeport mines should not take any higher rates than from the mines from the Freeport district. I repeat that we are contending that all the mines in the Pittsburgh district and the Freeport district should have the same rates.

(2425) I do not think that these mines in the Pittsburgh district that I show on this exhibit should take any higher rates, to these northeastern Ohio points, than mines in the Freeport district.

This exhibit deals only with Youngstown. I am asked whether, in principle, my answer would be any different to other points in northeastern Ohio. As I said before, we are contending that the Pittsburgh Freeport district should have the same rate as it has now. There is no attack made on that, in the relationship to each other. (2426) We are attacking the Pittsburgh Freeport rate to northeastern Ohio in relation to Ohio No. 8 and Cambridge. We are attacking this under Section 1, under the reasonableness. [fol. 2307] My Exhibit 378 shows that there are 90 mines in the Connellsville district that have no facilities other than all-rail.

I would not say that many of mines are located well back from the river so they cannot reach the river and ship their coal, because there are a lot of things we might think could not be done today that can be done tomorrow. (2427) My answer when I said that this exhibit showed there are 90 of them who haven't any facilities other than all-rail does not indicate 90 of them are on the river.

I am testifying for interests in the Connellsville district as well as interests in the Pittsburgh district in this case. I do not mean that I am testifying for all interests in the Connellsville district.

(2428) I am asked, in connection with my Exhibit 383, whether it is my thought in presenting the exhibit that it costs more to handle coal from what I designate branches of the Monongahela Railway than from mines on what I designate the main line of the Monongahela Railway. This exhibit does not show that. At the Washington hearing the same question was asked Mr. Petersen as to whether he knew the production of main line versus branch line, and [fol. 2308] if I recall it he did not. This puts in the exact figure as to where the production is. The question was asked of Mr. Petersen by our counsel. I am now presenting an exhibit to supply that information.

(2429) What we have used here as the main line is the main line of the Monongahela Railway operating along the river. Everything else comprising the Monongahela Railway are branch lines. (2430) I know that the Scotts Run

Branch, so denominated by me, was at one time an independent railroad. I would designate it as a branch line on the Monongahela Railway. If it is an independent line and the only line in operation for that particular line, it would be a main line. (2431) It is not an independent railroad today. It was at one time, but that could be stated as to a number of railroads. I am asked whether I know that at one time it was an independent railroad before it was taken into the Monongahela System. I understood that to be the fact. Considering that it was the only line in operation at that time, I presume that line would call it a main line. When it became a part of the Monongahela System it immediately became a branch line. I don't know anything about whether, because of the fact that it was taken into the system, it would immediately increase the cost of transporting coal.

(2432) I am asked whether, by my testimony here, I am attempting to leave the impression with the Examiner that it is more costly to handle coal off these so-called branches of the Monongahela Railway than it is from the main line. [fol. 2309] I don't know anything about the cost of operation. This exhibit does not in any way deal (2433) with costs, and I can't make any answer as to whether there is a more extensive cost operating anywhere.

My exhibit shows that there are some very large operations on the so-called branches. I am not familiar with how coal is handled from mines over these particular branches.

(2434) It is pointed out that Exhibit 311 shows the Montour Railway as running from Montour Junction down to Library, crossing to Pennsylvania line at some intermediate point not designated on the map. The map apparently shows the correct location, but as to whether it is a branch line, I would say no. I would not consider the portion of the Montour, even from the Pennsylvania Railroad down to Library as a branch line. I mean where it crosses the Pennsylvania, and then running down to Library. It is true that my answer is predicated on the fact that the Montour is an independently owned and operated line.

I am asked to look at my map from the Pittsburgh district, Exhibit No. 372, and to say whether I find there are branch lines in the Pittsburgh district. It may be there are branch lines in the Pittsburgh district. (2435) There

are mines on branch lines in the Pittsburgh district. I would not go so far as to say how many.

I am asked whether the items under the heading on my Exhibit 387, "Hire of Freight Cars Balance" enter in any [fol. 2310] way into the determination of the operation ratio of the Monongahela and Montour Railways. (2436) Exhibits 385, 386 and 387 were put in at the request of counsel, and I am not an accountant and I can't go into detailed figures on this exhibit.

(2437) I am asked whether I do not know that freight car hire in the Commission's statistics is excluded before operating ratio is determined. That is why we put it in separately.

(2442) I am reminded that I criticized the study which Mr. Petersen made of tractive effort, on the ground that he had not included the line of the B. & O. I am asked if I understand that Mr. Petersen's figures were drawn from exhibits which the carriers presented in the Lake Cargo Case. Our testimony as to this tractive effort (2443) dealt with the showing made on your Exhibit No. 225, which does not show the B. & O. Railway. My understanding is that they are apparently carriers' exhibits, so indicated on the exhibits.

The first page of my Exhibit No. 101 is taken from the carriers' studies. It shows the Pennsylvania's figures. I don't show the B. & O. It is true that I criticized Mr. Petersen for not showing the B. & O. I specifically said why it [fol. 2311] did not show the route of the B. & O. was because it was south of Maidsville, and Maidsville is the first showing you make as to tractive effort.

(2444) In the succeeding pages of my exhibit I present the route of the B. & O. as well as other routes in the Pittsburgh district, using Mr. Ackerman's figures.

I do not recall what testimony Mr. Ackerman put in in connection with coal moving via the B. & O. from off the Monongahela. But that still would not cover the B. & O. movement in the Fairmont district.

[fol. 2312] I am asked by the Examiner, referring to my map, Exhibit 372, whether the reason I showed these groups down here, including Fairmont No. 1 and Fairmont No. 2 and Belington, as different groups is because they take different rates as a rule, to northeastern Ohio. (2445) To some

points in the nearby northeastern Ohio territory there are different rates from these groups which are shown by my Exhibit 373.

By Mr. Burgess:

In my Exhibit 374, in the third column entitled, "Pittsburgh District Group Rates as shown on Eldridge Exhibit 131," I found that those were the rates from the Bessemer & Lake Erie mines of the Pittsburgh group, as published by that railroad. Under the fourth column the rates shown are published by the other carriers, that published rates from the Pittsburgh group to those destinations. That would include the P. & L. E., the Pennsylvania, and the B. & O.

I think it is correct to say that the destinations shown on Exhibit 374 are the only ones appearing on Exhibit 131 where the rates from the Bessemer & Lake Erie Pittsburgh mines (2446) were different than those from the mines on the other three roads. I am asked why the rates from the Pittsburgh mines on the Pennsylvania, B. & O., and P. & L. E. [fol. 2313] to the destinations shown on Exhibit 374 are lower than the rates published by the Bessemer & Lake Erie from the mines of the Pittsburgh group on its road. I don't know that I can say exactly why, but the adjustment is one that was made in a former decision affecting those rates. The Bessemer & Lake Erie was not a party defendant to the case; the originating carriers were.

On my Exhibit 375, Detroit, Michigan, one of the destinations has a rate from the Freeport district of $2.40 via the Bessemer & Lake Erie and the car ferry route and the Pere Marquette. These are strictly all-rail rates without considering the car ferry. (2447) I understand that no business has moved via the car ferry route lately. There has been business moved that way.

Via the car ferry route, Detroit, Michigan, has a destination on the Pere Marquette intermediate to some town, which may be Ecorse, though I do not recall the name, but I know there is an intermediate application there on the $2.40 car ferry.

I cannot say offhand whether there has been any movement to any of the destinations shown on Exhibit 375 from the Freeport district other than to the destinations of Cleveland, Lorain and Youngstown. The stations which I have on Exhibit 375 are all good size cities and they represent in

[fol. 2314] a general way a group which includes a number of smaller cities.

My attention is directed to Exhibit 376, where at the top of the exhibit I show captive mines, and at the bottom the commercial mines located in the Freeport district. (2448) I do not know by whom the Francis and the Berry mines are controlled. Without making an independent check I could not say for certain where the coal which I show from these two mines as produced in 1930, 1931 and 1932 moved to, but it moved up near the Wyandotte territory.

The Russellton No. 2 mine is the mine of the Republic Steel Corporation, and all of the coal from that mine moves to Youngstown.

[fol. 2315] The Indianola mine is the mine of the Inland Steel Company at Indiana Harbor. I assume, although I don't know, that the coal from that mine moves to Indiana Harbor, in the Chicago district. (2449) The Harwick mine is controlled by the Duquesne Light Company. I cannot say whether that company takes all of the coal produced at that mine, but if not it takes nearly all. That company is located and the coal is consumed about a mile away from the mine. The movement is not by a trunk line railroad, but by plant facility of the Duquesne Light Company.

As to the captive mines, in so far as there is any railroad movement out of the Freeport district, my information is that outside of the Russellton No. 2 mine where the movement is to Youngstown, the coal moves out of the Freeport district to destinations where the rates are lower from the Freeport district than from the Pittsburgh district, namely, to Wyandotte, where the rate is $2.40 against the Pittsburgh rate of $2.60, to Indiana Harbor, where the rate from the Freeport district is $2.99 against the Pittsburgh rate of $3.09.

(2450) The mines listed on Exhibit 376 are intended to show all the mines that were producing coal in the Freeport district in 1929, 1930 and 1931.

Without having the exact figures I would say that there is a movement from some of these mines to lake cargo. When the coal moves from the Freeport district from these mines by the port and lake cargo rates, they move on a rate basis 15 cents under the Pittsburgh rate, lake cargo.

[fol. 2316] Referring to the commercial mines shown on exhibit 376, I don't know the exact location in which the

tonnages were shipped from any of these individual mines. The only information I would have as to the movement would be to check up the tonnage statistics to indicate where they went from the Freeport district, and that would give it.

(2451) I am asked if, outside of Cleveland and Lorain, there was any substantial tonnage moving to C. F. A. territory from these commercial mines during the three years mentioned. I am reminded by Mr. Burgess that the exhibit I offered at the previous hearing in Columbus shows the movement for the year 1930, of something like 111,000 tons, from the Freeport district to Cleveland and a very small movement, something like 474 tons to Lorain. I put in the figures showing the tonnage to the northeastern Ohio destinations—that is correct. Besides the tonnage that moved to Cleveland and Lorain, in 1930, there has been tonnage moved to other cities (2452), but without checking up the tonnage statement I could not say as to what volume or where it went. It might be substantial when you compare the totals of those districts.

The exhibit I offered at the former hearing showing the movement to northeastern Ohio destinations from the Freeport district, is Exhibit 99. I have it here. The tonnage moving from the Freeport district to Cleveland was 111,067 tons, and to Lorain 96 tons. There was no movement to these five other destinations. Without referring to a ton-
[fol. 2317] nage statement, I could not say whether there was any 1929 movement to Cleveland from the Freeport district. I have not seen any 1932 figures. (2453) I think Mr. Kern's exhibit 368 shows the average movement from June to October, for the years 1929 through 1932. I do not know whether the movement to Cleveland, as shown by Mr. Kern's exhibit, is a regular movement or whether there is any special purpose in mind.

[fol. 2318] (2454) In presenting my exhibit 377, I stated that this was from mines that were less than 94 miles to Youngstown, which from the Freeport district via its shortest tariff route, the most distant mine as shown by your exhibit was 95 miles, and these are mines that are 95 miles or under. I cannot say, offhand, as to the figures of the furthest distant mines in the Pittsburgh district, from Youngstown. I think there is a mine located in the Pitts-

burgh district at least twice the distance from Wildwood Mine to Youngstown. That is also true from the Freeport district to Youngstown. From the Freeport district mines on the Bessemer & Lake Erie to Youngstown via some routes it would be more than 120 miles. (2455) If you are speaking of short tariff routes, I would not say the distance would exceed any 120 miles. It would be double that from Wildwood.

I am asked to look at my exhibit 384. The mines on the Montour Railroad in the Pittsburgh district to Cleveland are located an average distance of 138 miles therefrom. That is shown on page 1. Page 2 shows that the Ohio No. 8 mines on the B. & O. are an average distance of 152 miles from Cleveland. (2456) Yet it is true that our No. 8 has always had a lower rate basis to Cleveland than our Pittsburgh district to Cleveland. Distance does not always govern; not in connection with groups unless you take the average from the group. That is what we have done on this exhibit. It is not true that I am not treating your Freeport district with respect to the Pittsburgh district the [fol. 2319] same way. We are treating every district in exactly the same method.

(2457) Your distance from the P. & W. V. mines to Canton is shorter than the same P. & W. V. mines to Youngstown, but that has nothing to do with the question of a comparable figure in this exhibit from every group. It is true that the rate from these same P. & W. V. mines to Youngstown is 25 cents lower than the rate to Canton from the same mines.

I do not know, without checking it up, whether there are any mines in the Connellsville District that are nearer Youngstown than the most remote mines in the Pittsburgh district. The group distance from the Pittsburgh district to Youngstown is lower than the group distance from the Connellsville district. The rates are made on group distances, I think.

I am asked whether I am advocating any split of the Pittsburgh district mines as they exist today to Youngstown. We are not advocating any change in any of the groups, Pittsburgh or Freeport to any of these destinations.

(2458) My exhibit 378, 379 and 380, referring to mines which in the year 1929 were rail-and-river mines and mines

which were river only, do have facilities for dumping on the river, and some of them as indicated there also have facilities for dumping rail-and-river.

I think those three exhibits indicate that those are the only mines that could use the river facilities. I mean now. I am making no prognostications about the future.

[fol. 2320] (2459) I don't know whether the Nemacolin mine of the Youngstown Sheet & Tube Company had any facilities for reaching the river prior to the summer of 1932, or not. I think they did some work down there. I don't know to what extent it was a new building or reconstruction.

Referring to my exhibit 384, sheet 1, I do not recall that the various mines I have shown there in the Pittsburgh district include any mines in the so-called Moundsville district. As to whether the Moundsville district mines take the same rates to Cleveland, Akron, Canton, Massillon and Lorain as the mines of the Pittsburgh district, I can't say without a check. (2460) I would not want to say that there are no differences in rates to all of the destinations in northeastern Ohio named. I think there are one or two points where there is a difference in the rate from Moundsville of $1.74 and from Pittsburgh of $1.84.

On page 13 of my exhibit 384 I have combined the distances from the Pittsburgh district mines and Freeport mines to Youngstown, the same as we have done on all of them. To Youngstown, Ohio No. 8 takes the same rates as the Pittsburgh district. I cannot say to what extent the mines in the Moundsville district take the same basis as Pittsburgh to Youngstown. There may be some northern mines in there that take the same.

(2461) I am asked if the Cambridge rates to Canton and Massillon are the same today as they were in 1931. The Cambridge rate (2462) is the same as it has been for some time, but prior to these reductions No. 8 and Cambridge [fol. 2321] had the same rates. The Cambridge rate to Canton is $1.26, and that is the same rate as it was prior to the reduction from Ohio No. 8. I don't have the figures here, but I think that is also true as to Massillon.

By Mr. Ballard:

(2463) The heading "Number of Mining Points" on page 1 of my Exhibit 384 means the number of mines on the rail-

road via those routes, in other words, there are 18 mines on the B. & O. The authority for those 18 mines is Eldridge's Exhibit No. 348. That is true of every figure in that column. The mine list is Mr. Eldridge's mine list in each case. (2464) I don't remember what Mr. Eldridge's authority was, but I know we checked these and they were correct. We checked them against the tariffs. That included both the Pennsylvania lines west and east as they designate them. There are 84 mines on the Lines West and 274 on the Lines East. There may be other mines moving different ways, than via those short routes, but they include what we would term mining points and not particularly active mines.

The underlined phrase "*All mining points* in districts named", means all mining points in those districts; we cannot make any differentiations as between active and inactive. (2465) The authorities for all of them are the tariffs referred to in Mr. Eldridge's exhibit or in Mr. Kern's exhibit whichever ones were used there. This happens to be exhibit No. 348 of Mr. Eldridge. The asterisk carrying the foot notes "Eldridge Exhibit No. 348" refers to every figure in the center headed "Number of mining points" so far as the Pittsburgh District is concerned. The next figure 3390.4 miles shown in the Exhibit 348 represents a computation of the total miles from all mines via the B. & O. direct to Cleveland—from all of the 18 mines. That is the total of all of them into Cleveland. It is indicated on this Exhibit 348.

[fol. 2322] (2466) There is sufficient information in exhibit 348 to check that computation. That is, the basic data is given in exhibit 348 from which the arithmetic can be done, producing the 3,390 miles. That is true of every figure in that column and throughout the exhibit.

Referring to page 2 I am asked by Mr. Ballard whether the answers would be the same, where the authority is Kern's exhibit 33. Kern's exhibit 33 is a statement of average distances via all tariff routes purporting to be all mining points—all tariff origins. (2467) We call it number of mining points. It is the same thing.

I don't recall if any of Kern's exhibits enumerate each individual mine, but I did not use it in compiling this exhibit. I took the figures indicated on each of the exhibits this refers to, to indicate the number of mines and the total

mileages. That computation is theirs, and not mine. I don't know whether the computations of the total mileages are shown on Kern's exhibit, but I know them to be correct from the tariff, because we have checked them back against the tariff.

The figure 21 P. R. R. mining points on page 2, we checked against their Pennsylvania tariff. My reference here shows it to be I. C. C. A.A.—2035. As to whether it is my understanding that the 21 mining points on the Pennsylvania Railroad are mines and do not include tariff origins other than mines, I don't so understand it includes anything except mines. I will stand corrected if the tariff shows it differently.

[fol. 2323] The 358 P. R. R. mines on page 1 of the exhibit are individually outlined on exhibit 348. They are only mines.

(2469) It would seem to me that the 66 mines on the Wheeling and Lake Erie on page 2 include tariff origins other than mining points.

I am asked whether the formula for selecting the points in this column ought not be the same on all of these pages in order to give comparable results. That is what they are intended to be. They are compilations of figures already in the record, put in one exhibit to show what is purported to be the short tariff routes from each origin district to each of these destinations.

(2470) It is pointed out that page 1 shows mining points and page 2 shows all tariff origins, and I am asked whether or not that does not make them uncomparable. It might change possibly the theory of the number of mining points, but your miles of 123 are not dissimilar from what you put in or anybody else as to mining points only. You have the Wheeling and Lake Erie via the B. & O. as 123 miles. You might change the two columns next to the left of it to some extent and some of that has been done, but the distance of 123 miles will remain the same with a very small fraction of a mile. Our computation shows it as 122 miles. If there happens to be probably (2471) thirty mines on the Wheeling and Lake Erie with a lesser number of total miles, your 123 miles will not stand any different figure than that, even though you change the other two figures.

[fol. 2324] You may consider all tariff origins in one light and somebody else all mining points in the same light. But

there is not very much variation in the two of them. If you take all tariff origins as you say there probably are points where there are no mining points. (2472) I would say that from the standpoint of arriving at the ultimate figure they would be identical, so far as the total figure is concerned. I have got the same mileage of 135 miles, even with this different computation that you folks have put in yourselves, so that the result of those figures are no different. We could have left out all of this computation and simply put in the shortest tariff route miles from all of the origin districts and it would not have been any different from those figures. So far as 135 miles from No. 8 to Cleveland is concerned, it would be 135 miles or a fraction one way or the other under any other figures that are in the record. (2474) The result would be no different whether I used a different formula all the way through. That answer refers to the 135 miles from Ohio No. 8 to Cleveland.

My attention is directed to the Pennsylvania Railroad figure on page 1 of this exhibit, where I used 358 origins and get an average distance of 167 miles. It is stated that the record shows that there are 752 tariff origins on the Pennsylvania, which is more than twice the number I show here as mining points. I am asked if I mean to be understood as saying that the use of the larger number of tariff origins would produce the same mileage. Not in that one instance—it would produce probably three or four miles [fol. 2325] greater. (2475) I would say that none of the figures for the individual railroads in this exhibit, other than the Pennsylvania Railroad, would be changed by the use of all the tariff origins as distinguished from mining points. The Pennsylvania Railroad list is from the Eldridge exhibit.

My exhibit 378, covering 1929 tariffs, on page 1 shows that in 1929 mines in the Pittsburgh and Connellsville (2476) districts having access to the river produced 26 million tons of coal. These 39 mines have river facilities. As to whether there may be other mines, which, for a reasonable investment, could procure river facilities because of their proximity to the river, those are not counted in there at all, if there are any.

I do not have the exact figures, as to how much coal the State of Ohio produced in 1929. I think they were put in in my exhibit number 99.

It is stated by Mr. Ballard that between 23 and 24 million tons was the total of Ohio production in 1929 and that my exhibit 378 indicates that there is sufficient Pittsburgh and Connellsville tonnage having access to the river to replace every ton of Ohio production if the Ohio rail rates are not on a basis to compete with the river rates.

(2477) I am asked the question: "And if you take the rate situation at Cleveland, simply by way of illustration, and if you take the river cost testified to by Mr. Vilas at Washington, you would have a cost of delivering this coal at the river tipples on the River Division of the Wheeling [fol. 2326] Railroad or at Colona and Conway, for that matter, of 37 cents a ton plus an ex-river rate to Cleveland of $1.27, making, what is that—$1.64—as against the rate which the carriers are seeking to restore from the Ohio No. 8 district of $1.74, so that at least in the case of the Cleveland rate relationship the proposal here under consideration would result in the introduction of enough river coal to replace every ton produced in Ohio?"

I understand that the question assumes that the $1.64 rate is the only cost that would be delivered into Cleveland, that is the river haulage, plus the lifting, plus the ex-river rate, and that it does not take into account any investment or degradation. As to the two figures (2478), that would make a difference of 10 cents.

[fol. 2327] (2479) I am asked to look at my Exhibit 381 and to state whether the basis information is available in this record to check my correction of Mr. Ackerman's short tariff routes. My attention is directed to the heading, "What Average Distance would be Via Correct Tariff Routes." The figures could be worked out under the routes shown here on this particular sheet. For instance, if you want to take the B. & O. mines, the shortest tariff route indicated there is Zanesville and the Wheeling, Mogadore, A. C. & Y., and from those seven mines you would get a total of 1,054.4 or an average of 150.6. That could be determined right from that particular route. We use the same mines that Mr. Ackerman has in routing in this particular way. We get the mileages for this route out of the B. & O. tariff. (2479) All of the basic figures necessary to arrive at my short tariff route distances are in Ackerman's Exhibit 246. If they are not, we will be glad

to furnish the basic figures for the middle three columns under the heading referred to.

What I call "manufactured" routes are the routes which Mr. Ackerman used from these particular mines via other than the tariff routes to these destinations. When I say "manufactured" I mean as distinguished from tariff. (2480) I make no contention that they are not reasonable direct routes. They are not, as I indicated, the tariff [fol. 2328] routes. In this exhibit we have taken and shown the shortest tariff routes, not only from the 15 mines he used, but also from all of the mines. My figures as originally used here show the entire mining list from these railroads, and then as a matter of comparison I have taken his own 15 mines and showed them in the short tariff routes in comparison with what he showed as the shortest actual route.

The authority for the selection of those 15 mines was Ackerman's Exhibit 246. They are his own mines, I have not made any change. (2481) I just took the 15 mines he used and accepted them as a measure to compare with. I did not have in mind that they were the mines selected by the carriers and approved by the State Commission in the Republic Steel Corporation Case as a proper list.

I am now asked this question: "Now, as I understand it, you have a correction here in Exhibit No. 382 of one of Mr. Ackerman's Pittsburgh distance exhibits. You made two or three important corrections of Mr. Ackerman's figures on your Exhibit No. 382, notably that to Cleveland where, by the inclusion of the Moon Run Branch, you get the distance down from 170 miles to 138 miles from Montour mines. Now, I notice that that was the only one of Mr. Ackerman's very numerous Pittsburgh exhibits that [fol. 2329] you corrected, and I notice that your final Pittsburgh figure as shown on one of your exhibits is 166 miles to Cleveland, and Mr. Ackerman's final Pittsburgh figure is 166.8 miles to Cleveland. Would that difference of .8 in your final result and his final result be the effect of this Montour correction?"

(2482) It would not. In this case here there has been considerable discussion as to the short route of some important railway originating coal in the Ohio No. 8 district, presumably the Wheeling & Lake Erie, and that is shown

as 136 miles. In comparison with that he shows, as he purported on Exhibit 274, the shortest tariff route from an important, if not more important Pittsburgh district railroad as 170 miles to Cleveland, whereas the shortest tariff route is actually 139 miles via his same mines that he had.

Following that correction clear through to a figure for the entire Pittsburgh district, it would not have any effect on the final figure if you compare the average of all of the mines in a group with all of the mines. If you made the final Pittsburgh figure without the correction shown on Exhibit 382 and then made a final Pittsburgh figure with these corrections, the difference, I would say, would not exceed a half, possibly between a half and a mile.

[fol. 2330] (2483) It is asserted that I criticised Mr. Ackermann's Exhibit No. 272, this morning, which shows the location of mines and distances to northeastern Ohio destinations. My criticism did not refer to this exhibit. If my memory serves me correctly, the discussion was between certain tractive effort figures as between two given points on the B. & O.

By Mr. Bull:

(2484) Referring to my Exhibit 384, the column headed "Number of Mining Points," I am asked if I made a distinction in that column between what might be mines or what might be stations on the exhibits from which I got the data, or whether I took all origins shown on those exhibits, regardless of whether they were mines or stations. We used what they have shown on these exhibits as mines or tariff stations, without separating any of them.

By Mr. Webber:

Referring to my Exhibits Nos. 378, 379, and 380, I am asked whether the reports of the Pennsylvania Department of mines are made up by months. I cannot recall seeing any monthly statements at all. I do not have any figures at all for the year 1932. (2485) I would not say whether they are obtainable direct from the Bureau of mines or not. They are not published as yet, anyhow.

[fol. 2331] Redirect examination.

By Mr. Gutheim:

I am asked whether, in referring to the discontinuance of

the car ferry operation on Lake Erie, I mean a mere seasonal discontinuance on account of winter weather, or was there a discontinuance before the winter weather came on. I think there has been a discontinuance entirely for some period of years.

The lake cargo coal rates of the Bessemer & Lake Erie from the Freeport district does not apply to any transshipment port except its own port at Conneaut.

The production of the strictly river mines and the rail and river mines in the Pittsburgh and Connellsville districts includes all of the captive mine production that was shown, so far as mines were concerned, on Mr. Durham's exhibits in Washington. It includes captive and other. I do know that the great bulk of that captive coal production is consumed right along the river by the owners of the coal.

(2486) The point of my Exhibit 382 is that if rates are to be made on the basis of the shortest tariff routes from the nearest mines in a producing district to a given destination and in a district which produces a sizeable volume of coal, that instead of having 170 miles from the Pittsburgh district Montour mines to Cleveland, you would have 138 miles.

[fol. 2332] Exhibit 382 was for the purpose of correcting errors on Ackerman's Exhibit 274.

On my Exhibit 382 I show exactly the same mines as on Ackerman's Exhibit 274 (2487) and, as I explained in my testimony, Mr. Ackerman failed to include the Moon Run Branch and we have included that, but we have shown it separately, so that there are not any changes there that are not readily discernible, and that the correct distance to Cleveland from Montour, which is a very important Pittsburgh origin railroad, is 138 miles and not 107 miles. The Moon Run Branch is the Montour Railroad branch which extends 4½ or 5 miles.

We have never made the contention that the weighted average distance from the various groups should control rates.

[fol. 2333] R. M. PAISLEY was recalled, and having been previously sworn, testified as follows:

Cross-examination.

By Mr. Orcutt:

(2488) In my discussion of exhibit 342, which appears at

page 1922 of the record, I refer to the various increases that have been applied to the rates from the Pittsburgh and Ohio No. 8 districts to Cleveland during the past years. They are just the so-called general increases. Those increases in those rates were made under the plan described in this record by witness Kern and which was concurred in by all carriers and approved by the Interstate Commerce Commission—up until August 1 in the case of the Ohio rates, and October 5 in the case of the P. & W. V. Pittsburgh rates. As to whether our reduced rates from the Pittsburgh districts and the Ohio reductions practically eliminate from the rates all of the Ex Parte 74 increases remaining after the ten per cent reduction of 1922, I haven't figured that. I haven't made that calculation.

(2489) Exhibit 342 shows the rate from Pittsburgh, P. & W. V. Railway, effective October 5, 1932, of $1.55 net ton is ten cents per ton higher than the rate in effect prior to the August 26, 1920 increase. The increase effective August 26, 1920 was 60½ cents, and 21½ cents was taken away under the 10 per cent reduction. And 29 cents was taken away by my reduction, leaving the rates via our lines now 10 cents higher than they were prior to the Ex Parte [fol. 2334] 74 increase.

I am asked if I know of any justification from a carrier's standpoint for the elimination of the Ex Parte 74 advance at this time, particularly when thought is given to the pending consideration the Commission has given to a continuance of the Ex Parte 103 emergency increase. If the various increases and the reduction will apply to a rate that was wrong to begin with, you would get that result. (2490) I am not giving that as a justification. I am giving it as an answer to your question of why you might do it.

Our reduced rates from the Ohio No. 8 district became effective August 12, 1932. That was approximately three weeks before the reduced rates of the B. & O., Pennsylvania and New York Central became effective. My attention is directed to page 1927 of the record where I say that the P. & W. V. has but four small mines in the Ohio No. 8 district which ship but a negligible tonnage of coal to Cleveland, Lorain and Huron. The reason our rates were reduced from Ohio No. 8 three weeks before the other lines, was that we just beat the other Ohio No. 8 district carriers to it. I would not say that it was done to pave the way for the

reduction from our Pittsburgh mines. (2491) I am asked whether I agree that the Pittsburgh district rates should be measured from the standpoint of all mines in the group rather than from the mines on the P. & W. V. or any other [fol. 2335] single carrier. I have given a lot of thought to what my answer would be to such a question if I was asked it, and my answer will depend on several things. If the Commission finds that a mileage scale should be applied to rates from the Pittsburgh district, I want to know first whether we are going to continue the practice of leaving some mines that should be in the Pittsburgh district out of the group, such as your P. W. & K. Division mines, down there in the Pan Handle of West Virginia, and whether we are going to put the Greensburgh district east bound 15 cent over us in the Pittsburgh group to Cleveland, and what the B. & O. Railroad is going to do from the Fairmont district to northeastern Ohio territory, to which they now have rates that are less than 15 cents over Pittsburgh. After I know the answer to all those questions, then I will tell you whether or not I want to still stay in the Pittsburgh group. That is, if a mileage scale is applied. (2492) Speaking of rates other than those under a mileage scale, I would say my answer would be the same.

I am not positive whether the class rates prescribed in the Eastern Class Rate Case referred to by me on direct are in effect in Illinois. I know the iron and steel rates are not, which is the next case, because the carriers have had before them for some time past the question of filing a Thirteenth Section complaint to bring those rates in har- [fol. 2336] mony with the interstate basis. I do not believe the Eastern Class Rate adjustment is in effect in Indiana.

The 17,000 Part VI rates are not in effect in Indiana.

(2493) Referring to the Crushed Stone from Hillsville to destinations in Pennsylvania, Ohio and West Virginia, 148 I. C. C. 142, it is my understanding that that decision was not for application within Indiana and Illinois or to points in those states. The next case I mentioned was the General Cancellation of Less Than Carload Commodity Rates, 140 I. C. C. 227. I am asked if that decision is being applied or was it for application in Pennsylvania or Ohio. I. & S. 2821 involved really the measure of the rates in Illinois as compared with the rates in C. F. A. generally, and the findings of the Commission were that the rates should

be on the same level. I don't recall what commodities were involved. I cannot say as to whether the Illinois rates were increased in some instances to the Ohio and Pennsylvania levels. I did not check the tariffs to find whether the order had been complied with. I only referred to the findings of the Commission.

(2494) I then mentioned the Pennsylvania Sand and Gravel Producers' case, 104 I. C. C. 717. I cannot say, offhand, whether the rates fixed in that decision applied in Indiana or Illinois, because my testimony concerning these [fol. 2337] cases dealt with the fact that the Commission not only fixed the basis of rates, but referred to the transportation conditions in C. F. A., and the purpose of the citations was to show that the Commission recognized that the rate levels where they prescribed these rates in western Pennsylvania and eastern Ohio should be on a general level with the rest of C. F. A., including Indiana and Illinois, and the cases speak for themselves. I know that that case did not include Indiana and Illinois.

I am asked to state the approximate difference in levels in the rates on crushed stone and sand and gravel in Illinois and Indiana as compared with Ohio and Pennsylvania at the present time, the existing rate. I would not want to answer a question of that kind, particularly in view of what has happened in the last year. There has been so much chiseling of road building material rates not only in western Pennsylvania but in Ohio and Indiana, particularly to meet truck competition, that today I could not tell you how they compare. There are several scales of rates used in Indiana to make road making material rates. (2495) My observation is that the rates are not very far apart.

The rate of $1.28 that I spoke of at page 1940 of the record, as the lake rate to Cleveland, was the rate applicable from the Pittsburgh district to Lake Erie ports on cargo coal destined Canadian points, part of last season. Personally, I would say that was the rate. I would not say that it was published as $1.28, but when you went through the mechanics of the tariff you finally wound up with $1.28. That is not in effect today. It expired with the end of 1932.

I am familiar with the history of that $1.28 rate, or the 18-cent refund problem.

[fol. 2338] (2496) The P. & W. V. publication to Port Maitland was brought about by the action of the United

States lines accepting Canadian funds via Black Rock and other gateways into Canada, and as the result of the publication of the rate to Port Maitland, Ontario, to protect our interests, the other lines wound up with an 18 cent reduction to practically every port in Canada. I deny that the P. & W. V. were the cause of that reduction.

Black Rock is a point on the Canadian frontier. No carrier published any other rate nor did any tariff provide for an 18 cent refund prior to the publication by the P. & W. V. of its thru Port Maitland rate.

[fol. 2339] I don't know whether the North American Coal Corporation owns a dock at Port Maitland. Anything I tell you about that relationship would be hearsay, and valueless. I understand that the New York Central Railroad owns about 70 per cent of it. I don't know whether that is correct or not.

(2497) I published the through rate to Port Maitland on instructions from Mr. Taplin, who had been advised to do it by Mr. Bronson, and that, as I understand it, followed Mr. Bronson's efforts with the Interstate Commerce Commission to have the freight revenue to the Canadian border paid in United States money, and which attempt was futile.

Neither the Interstate Commerce Commission nor any representative of the Commission ever asked me to cancel that rate. (2498) Nor have they ever suggested that it might be well to cancel it, to my knowledge. To the best of my knowledge it has the approval of the Commission.

Since our reduced rate was published from our mines in the Pittsburgh district to Cleveland and since it went into effect, I would say that our traffic on coal to the points to which the reduced rate was applicable has increased to more than normal.

[fol. 2340] By Mr. Ballard:

Reference is made to page 1925 of the record, where, discussing the Ohio-Michigan cases, I made a statement with respect to a finding concerning the 10 cents from Pittsburgh over No. 8 to Cleveland. ((2499) I don't know (after reading the record) how I could make that any clearer. I am asked whether I intended to state that the Commission made a finding in terms on page 689 that the 14 cent relationship

between No. 8 and Pittsburgh was unduly preferential and prejudicial. The order speaks for itself, I believe.

I am reminded that on page 1926 I made the statement: "Had the Commission issued an order in the Thirteenth Section Case in 1923, a 10 cent differential to Cleveland, Lorain and Huron, in non-affected territory would have been protected and the Wheeling & Lake Erie would have been powerless to have reduced the Cleveland, Lorain and Huron rates on August 1." Whether or not that is a true statement depends upon what the finding in fact was with respect to these rates, and the language of the report would speak for itself.

(2500) On page 1929 my first answer on the subject of the reasonableness of our reduced rates in I. & S. 3801, is qualified by the language, "if not reasonable maximum rates." I would say that that qualification applies to all [fol. 2341] of our justification of our reduced rates.

At pages 1937, 1939, and other pages of the record I made comparisons of certain of the rates involved in our I. & S. cases with the 23922 scale as it existed prior to the report in that case on reconsideration. I have read the recent report several times and I don't know whether I am familiar with what the intention of it is or not. The scale has been changed and the method of calculating mileages has been changed. (2501) Also the method of selecting the points upon which the mileage is to be computed has been changed. It now includes potential mining points as well as mining points. Actual and potential—I think that is the language. [fol. 2342] I do not agree that the changes made make the comparisons referred to on those pages of the record obsolete. I think that if the mileages were recalculated on the new basis they would produce substantially the same rates as the old mileage formula and the old scale of rates. Upon whether or not that is true would depend the answer to the question as to whether these comparisons had become obsolete.

By Mr. Martin:

(2502) It is asserted that I testified in Washington that the reason we did not publish our reduced interstate rates from the Pittsburgh district to northeastern Ohio destinations via lines other than the Wheeling and Lake Erie was that we did not hold the concurrence of those other lines.

That is not a fact. Mr. Younger asked me why our rate should not be the same over the P. & L. E. route as it is [fol. 2343] over the Wheeling & Lake Erie route. And I told him the Pittsburgh & Lake Erie published the rates from our mines via the Pittsburgh & Lake Erie route. So I could not change the rates over that route. It is correct to say that we were not the publishing lines and did not hold the general concurrence of the Pittsburgh & Lake Erie. When we published the rate over the Wheeling and Lake Erie, it was under the general concurrence of the Wheeling and Lake Erie, which we held at that time, and which our company and its predecessor had held over a long number of years.

(2503) The date upon which we filed the tariff with the Interstate Commerce Commission, of those reduced rates from the Pittsburgh district, was August 9.

Before the supplement to the tariff making the reduction was filed with the Commission, we received a telegram from Mr. Edward Briggs, Assistant General Traffic Manager of the Wheeling & Lake Erie Railway Company reading substantially as follows: "Telephone conversation 21st W. & L. E. concurred in P. & W. Va. publishing reduced coal rates from Ohio No. 8 mines to same destinations published via W. & L. E. Please undertsand our concurrence covers only Ohio intrastate rates and W. & L. E. will not concur in reduced rates from Pittsburgh and other interstate origins on or via your line?"

Despite the receipt of that telegram and a confirmation, we proceeded to publish the tariff—under the Wheeling's general concurrence.

By Mr. Armstrong:

(2504) I am asked whether I made certain calculations [fol. 2344] concerning rates from mining points in Ohio to Cleveland under the 23922 scale, upon mileages constructed by myself. The question refers particularly to my testimony on page 1944, where I give the rate from the Hocking district to Cleveland, as $2.02. That rate is determined by applying the 23922 scale to the average distance from the Hocking group to Cleveland, as shown in Mr. Kern's exhibit 33. I made no independent mileage statement of my own. I adopted the mileage distance of Mr. Kern upon whatever theory he constructed it.

By Mr. Gutheim:

(2505-2507) I have not looked at the petition filed with the Commission for some time, but it is my recollection that I made the statement that the action I took around August 9, reducing our Pittsburgh rates despite the advice of Mr. Briggs of the Wheeling, was taken out of a recognition of the fact that had I not done so I would be in violation of the law, being guilty of undue prejudice to our Pittsburgh district mines.

[fol. 2345] Redirect examination.

By Mr. Bronson:

(2507) Getting back to that Port Maitland rate situation, it is true that the normal all-rail rates from the Pittsburgh district to Toronto are $3.24. This rate is made on the Black Rock, New York combination of $2.24 to the point and the rate of $1.00 from Black Rock to Toronto. As to whether it is true that Canadian consignees at Toronto were privileged to satisfy that rate by the payment of depreciated Canadian currency: We received our settlement in depreciated Canadian currency, so the consignees must have paid in the same kind of money.

(2508) As to whether it is true in order to meet that situation we published a rate to Port Maitland across Lake Erie of $1.84. We publish a joint rate from our Pittsburgh district mines to Port Maitland, Ontario, of $1.84. That rate was based upon the full $1.46 rate to Huron, a Lake Erie port, that is, the lake cargo rate plus 27 cents, the full tariff rate of the Northern Navigation Company, an interstate carrier, plus 8 cents dumping charge, with 3 cents added so as not to reduce the Huron, Ohio, local rate of $1.84. As to whether as a matter of fact the rate itself is a full tariff rate based upon $1.46, full lake cargo coal rate, and whether all we do is to accept Canadian money in payment of that rate: As you stated, it is 3 cents higher than would normally accrue, the difference being that if it was based on the lake cargo rate plus the boat charge beyond, the charge of $1.54 to get it into the boat would be collected in United States money. Publishing the joint rate to Port Maitland, the collection was made in Canadian money and it was collected in Canadian money.

[fol. 2346] (2509) As to whether there is any particular reason I can see why, if the Pennsylvania and other railroads can accept depreciated Canadian currency for their charges to Canadian points, the P. & W. Va. and the Wheeling can't do the same thing, I think we have the same rights as they have, and I think we also have the right to protect our long haul traffic, which we are doing in this particular instance. We kept the traffic moving via Huron, Ohio, which is the best route that we have for this coal to move over, that is the best route from a revenue standpoint. As to whether it is true that the net result of the publication of the reduced rate, or the method by which the rate was reduced, was to yield the carriers during the summer months on Canadian coal $1.28 to Lake Erie ports: It would work out about $1.28. As to whether that is the amount of money they got for the haul to Lake Erie ports, it may be that we got a cent or two more, because we took those three extra cents that I spoke of before in the division of the joint rate.

Q. Well, I am talking about the $1.28 now. I don't know how you worked that out.

A. Maybe I don't understand your question.

Q. Talking about the method that they put in to meet that situation, or at least that they claimed would meet the situation, by which they accepted, as I understand it, to Lake Erie ports, $1.28 for the haul from the Pittsburgh district to the port.

(2510) A. It was felt that the refund of 18 cents, cutting the rate to $1.28, would meet the joint rates that we and the Wheeling & Lake Erie filed to Port Maitland and sev- [fol. 2347] eral other Canadian ports. In fact, for a time they published those joint rates and then when they got the 18 cent refund O. K.'d by the Interstate Commerce Commission to file on one day's notice, they canceled their tariffs.

Q. Did they also meet the all-rail reduction due to the acceptance of depreciated Canadian money, as well as the cross-lake rate of ourselves and other carriers, at least to some extent?

A. I believe so.

In response to a question by Mr. Orcutt I spoke of the P. W. & K.—we always speak of that as the P. W. & K. branch of the Pennsylvania Railroad. It has such stations

as Weirton, New Cumberland, Brownsdale, Wellsburg, Follansbee, Beach Bottom, Wadwood, Wheeling and Benwood located on it. The rates from those points have been for many years the same as the Ohio No. 8 rates to Cleveland, that is, 10 cents less than the Pittsburgh group rates.

(2511) Q. Notwithstanding the fact that those points are located in the Pittsburgh group in the territory east of the Ohio River, which is commonly known as the Pittsburgh group?

A. I will put it this way, that with the exception of Cleveland, I believe Canton, Massillon and Akron, they have the Pittsburgh rates to substantially all of Central Freight Association Territory.

Q. So it is only to Cleveland that those particular mines have a 10 cent advantage over Pittsburgh, is that so?

A. To Cleveland they have a 10 cent advantage. It is my recollection that at Akron they have a 5 cent advantage.

[fol. 2348] Concerning the Greensburg situation, we checked out of the Pennsylvania Railroad east bound tariff 40 mines that are listed in my Exhibit 355 as located in the Pittsburgh group west bound that east bound obtain rates 15 cents lower that the Pittsburgh district rates east bound. I have never felt that it was proper for those mines to have the Pittsburgh basis west bound and something under us east bound. That is why I said that I would want to know if they were going to be included in the Pittsburgh group before I said that I was willing to put my mines in with the Pittsburgh group.

That is true with respect to the P. W. & K. mines and then the Fairmont district mines of the B. & O. that I also referred to.

(2512) I have filed two exhibits, Nos. 355 and 356, in which the distances were computed in accordance with my understanding, the requirements of the Commission in 23922 and 23130. That is to say, the mileage scale in the original 23922 via short tariff routes from all mining [fol. 2349] points. I am asked whether I can furnish the distance from Pittsburgh and West Virginia mines in the Pittsburgh district and the Ohio No. 8 district computed in acordance with the formula laid down in Docket 23922, January 24, 1933. I think I can furnish that for this rec-

ord before this hearing adjourns this week. In fact, I will put it in tomorrow.

(Mr. Ballard objected to the reception of any reconsidered distances on the basis of the revised formula, unless the same privilege be extended to him, and his interests. The Examiner stated that he might have the same privilege, of furnishing corresponding information, provided it is filed before the close of the hearing, and that the witness is present for cross examination. Mr. Ballard stated that it would be physically impossible to do the work before the close of the hearing. He noted an exception to the Examiner's admission of the short line distances from the respondents.)

Recross-examination.

By Mr. Orcutt:

(2516) The first statement concerning the establishment of rates to Port Maitland. I said that Mr. Bronson had gone to the Commission in an attempt to have the United States carriers collect their rates to the border with United States funds, and the Commission did not require the carriers to do that, and therefore, in order to protect our in-[fol. 2350] terests, particularly our long haul route that we had published the joint rates via the port of Huron to Port Maitland. Our revenue out of the rate to the Canadian frontier was not anything like it was out of the rate to the port of Huron. That is what I speak about when I say "interests"—the dollars and cents we get out of the traffic. (2517) Our interest was a division of the rate. The whole question seems to be based on the ownership of the Port Maitland dock, and I have already stated that I do not know anything about that ownership, only hearsay.

I have said that nobody connected with the Interstate Commerce Commission ever asked me to cancel that rate.

Redirect examination.

By Mr. Bronson:

(2518) As a matter of fact, I presented the mileage scale prescribed by the Commission in the original 23922 scale for such use as the Commission felt they should make of it.

[fol. 2351] J. N. SNIDER, recalled as a witness, and having been previously sworn, testified as follows:

Direct examination.

By Mr. Bull:

(2519) I am the general manager of sales for the receivers of the Consolidated Coal Company, and have already testified in this case. My attention is directed to the fact that at pages 1254-1257 of the record, Mr. Durham, vice president and general manager of the Wheeling & Lake Erie Railroad endeavored to show that the continuance of the present rates from Ohio No. 8, Middle and Massillon districts to Cleveland and Lorain would not adversely affect the revenues of the carriers on coal moving from Pittsburgh, Connellsville and Fairmont districts to those destinations.

Mr. Durham's testimony, page 1256, is to the effect that there is a sufficient quantity of coal available at mines on the Allegheny and Monongahela Rivers to supply all the by-product coking coal and the general purpose coal which has heretofore moved in all-rail routes from the Pittsburgh, Connellsville and Fairmont districts to Cleveland and Lorain.

Mr. Durham also said (page 929 and following) in explanation of the reasons which prompted his railroad to (2520) publish as of August 1, 1932, the reduced rates from Ohio No. 8 to Cleveland, Lorain and Akron, and other [fol. 2352] points in northeastern Ohio that one of the important factors taken into account was the effect of the recently established rates on ex-river coal.

And again, at page 256, Mr. Durham said that if the present Ohio No. 8 rate is increased to $1.74, the general purpose coal from western Pennsylvania and northern West Virginia may be diverted to the river, rather than to Ohio No. 8 in which event the carriers serving Colona and Conway would secure a revenue of $1.27 plus a lifting charge of 12 cents instead of the $1.45 from Ohio No. 8.

It is obvious from this that the reduced rates which have been established from the Ohio No. 8 district to northeastern Ohio were made by the Wheeling & Lake Erie Railroad in an endeavor to remove what they thought was a disadvantage to the Ohio operators in meeting the competition

of coal produced at mines along the Monongahela and Allegheny Rivers, which moved ex-river through the ports of Colona and Conway to this territory.

(Mr. Martin, on behalf of the Wheeling & Lake Erie, objected, and the objection was noted in the record.)

(2521) In addition Mr. Durham says (pages 940-941) (2522) that a further influence in reducing his rates was that immediately following the establishment of ex-river rates from Martins Ferry the river mines in West Virginia [fol. 2353] across the river from the Ohio No. 8 district began to ship coal to Cleveland, through the ex-river facilities at Martins Ferry and the management of the Wheeling felt that it could not consistently permit this situation to continue and that it should place the mines on its rails in the Ohio No. 8 district on a competitive basis with the river mines on the West Virginia side of the Ohio River. It is shown elsewhere in the record by other witnesses that this reduction by Wheeling & Lake Erie Railroad was met, either voluntarily or involuntarily, by other carriers including the Baltimore & Ohio Railroad.

I wish to call attention to the fact that while the ex-river rates were not limited in their application to the use to which the coal was to be put, domestic sizes of coal would not ordinarily move through the ex-river facilities because of degradation. On these sizes, therefore, the Ohio No. 8 operators would not be in competition with the ex-river movement. On the other hand, we in Fairmont producing and shipping both by-product coking and general purpose coal, not having access to ex-river facilities, due to the fact that the United States Government has not improved the upper reaches of the Monongahela River, are restricted to [fol. 2354] (2523) all-rail routes via the Baltimore & Ohio, Western Maryland and Monongahela Railroads and connections in meeting the competition of by-product coking coal moving from river mines in Connellsville and Pittsburgh districts, and in meeting the competition of general purpose coal moving from river mines in those same districts. We must now overcome the added handicap of these reduced rates from Ohio No. 8 mines on both domestic coal and general purpose steam coal. At Page 1257 of the record Mr. Durham remarks that it is an interesting

fact that approximately 74.28 per cent of all the coal received at Cleveland and Lorain (including South Lorain) from the Pittsburgh, Connellsville and Fairmont districts for by-product coking purposes, during the years 1926 to 1931, inclusive, was for the American Steel & Wire Company and the National Tube Company, and that the present practice of these companies is to have their coal moved from the mines of the H. C. Frick Coke Company, on the Monongahela River, by the fleet of the Carnegie Steel Company to Mingo Junction, where it is transferred from barges to cars through the transfer facilities of the Carnegie Steel Company and moves by rail on the ex-river rate of $1.27 to Cleveland and Lorain. It is obvious that [fol. 2355] Fairmont's proportion, whatever it might be, of the remaining 25.72 per cent must move via all-rail routes, as river facilities (2524) are not available, at a rail transportation charge of $1.99 per net ton as compared with the rail transportation charge via ex-river facilities of $1.27 per net ton.

While we are unable to separate our tonnages into the northeastern Ohio market as between special purpose coal and coal for general steam and domestic use, we know that a large part of it goes to general purpose uses, on which we are in competition with Ohio and other districts.

Granting, for the sake of argument, that Mr. Durham's view of the effect upon carriers' revenue is sound—although we do not admit it—he loses sight entirely of the injury which Fairmont has sustained as a result of the present adjustment. In my previous testimony I have already partially shown the extent to which our business from Fairmont is suffering by reason of the increase in spread between rates from Fairmont and Ohio caused by the recent reduction in Ohio rates. Our losses will continue and increase just as long as the Baltimore & Ohio and other carriers serving both the Ohio and Fairmont districts fail to accord to our Fairmont mines relief similar to [fol. 2356] that already (2555) accorded by them to shippers in the Ohio districts.

As long as this present situation exists, it is our view that the Baltimore & Ohio and other carriers are practicing discrimination against interstate traffic from Fairmont by failing to accord to mines in that district the same treatment they have accorded Ohio shippers on their intrastate rates.

My attention is directed to the fact that at page 1765 Mr. Ireland says:

"My company has tried for a long time to convert these plants (certain industries in Cleveland) to eastern Ohio coal, but even with the present freight rates, we have been unable to do so. Likewise, the Firestone Tire & Rubber Company in placing its 1933 coal contracts, has seen fit to place 20 per cent in Pittsburgh and Fairmont, while it could, if it would, buy all of its coal in eastern Ohio."

At page 1776 Mr. Ireland stated this 20 per cent was divided equally between Pittsburgh and Fairmont. He did not know how much was placed in those two districts in 1932.

During 1932 we had a contract with Firestone Tire & Rubber Company under which we supplied them with a substantial tonnage of our Fairmont coal. This contract expired on December 31, 1932. During December our local sales representatives were in contact with the purchasing agent of the tire company, seeking renewal of the contract. On December 14th I personally wrote the purchasing agent [fol. 2357] relative to such renewal and was advised by him that, while for a number of years they had used West Virginia coal and had been extremely satisfied with continuity of quality and service and was still using a majority of it at that time, he reluctantly felt forced because of the reduction in the Ohio freight rates to this year take the major portion of their requirements from the Ohio field.

The letter is dated Akron, Ohio, December 20, 1932, addressed to J. Noble Snider, The Consolidation Coal Company, 15 Broad Street New York, New York (2527).

"Dear Mr. Snider: Thank you for your letter of December 14 with regard to our coal contract. We were quite pleased to go along with the use of West Virginia coal as long as the freight rate made this possible. At the present time, we are still using a majority of West Virginia coal with the result that our company is being penalized a considerable amount due to the reduction in Ohio freight rate, which has now been in effect for some months.

"Our Traffic Department advise that in their opinion, it will be considerable time before there is a definite settlement in freight rate structure of the various coal fields. I

also received the opinion from the majority of those coal people calling on us that it will be some time between April and June before a definite decision on this rate structure is made.

[fol. 2358] "For a number of years, we have used West Virginia coal and have been extremely well satisfied with continuity of quality and service, and it is with considerable reluctance that we feel forced to go to the Ohio field for the major portion of our requirements, which present indications point that we will have to do for our 1933 requirements.

(2528) "We have enjoyed our relationship with your company and trust that the rate structure will soon be adjusted so that you will again be in position to contend for a portion of our business.

"Yours very truly, The Firestone Tire & Rubber Company, (Signed) R. W. Koch, Purchasing Agent."

I have read a statement from a part of Mr. Durham's testimony on page 940 of the record relating to the movement of coal on ex-river rates from mines on the West Virginia side of the river through Martins Ferry, immediately after the publication of the Wheeling & Lake Erie's ex-river rates. I have also read the conclusion of Mr. Durham's testimony, appearing at page 941, in which he indicated that it was the competition of these river mines on the Ohio River alone which, so far as ex-river rates are concerned, compelled the publication of the reduced rates from Ohio No. 8.

[fol. 2359] (2529) I agree that it was the competition of the river mines on the West Virginia side of the Ohio River and not the river mines on the Monongahela and Allegheny Rivers that compelled the reduction of the rates from the Ohio No. 8 district in so far as this matter of ex-river rates is concerned.

I have also referred to the fact that the Ohio No. 8 operators would not meet any competition from ex-river coal, due to the degradation incident to the movement of coal ex-river. I presume that this degredation can be removed by a proper screening at the transfer plants, if facilities of that character are installed.

[fol. 2360] If properly screened, the sized coal resulting from (2530) the process would be just as usable for domes-

tic consumption as if it were shipped directly from the mines in railway cars.

(2531) I am asked whether the letter from Firestone does not show that something less than half of the Firestone coal will continue to come from the West Virginia and Pittsburgh, even under the increased differential. The statement at the bottom reads: "And it is with considerable reluctance that we feel forced to go to the Ohio field for the major portion of our requirements." Formerly they got the major portion from West Virginia and Pennsylvania.

The point I am making is simply this: that in 1932, because of the rate adjustment as between Ohio and Fairmont which existed at that time, we were able to sell a substantial tonnage of our Fairmont coal to the Firestone Tire & Rubber Company. I mean "we" in Fairmont. In 1932 they got a majority from Fairmont. (2532) We complained about the adjustment which has taken place in the level of freight rates as between Ohio and Fairmont, which creates a situation which eliminates us from an opportunity to do business with the Firestone Tire & Rubber Company in the manner that we did with them in 1932, prior to this change in the established situation. In 1932 we had a majority, and now Ohio No. 8 has a majority.

(2533) As to whether there would be an expense customarily involved to screen coal as it would be unloaded from a barge on the river, I should say there would be some cost. There certainly is in screening at the mine. After we got the screenings eliminated we would have to take a lower [fol. 2361] price for the screenings than for the lump.

I am reminded that Mr. Morrow of the Pittsburgh coal company, testifying in December, stated that at that time 50 cents would be a good price for screenings, and if you were a good buyer you might buy it for a quarter. That is substantially our experience.

[fol. 2362] Testimony Taken at Columbus, Ohio, Feb. 10, 1933

LAWRENCE PETERSEN, was recalled as a witness, and having been previously sworn, testified as follows:

(2534) Direct examination.

By Mr. Keeler:

I am the same Mr. Petersen who testified previously in this case. During my previous testimony I asked permission to file an exhibit showing mileages from Bellaire, Ohio, which were used in constructing certain of the mileages set forth in my exhibits, and have prepared such exhibit, and wish to introduce it as Exhibit 388.

(Exhibit 388, Witness Petersen, received in evidence.)

I was also requested to prepare an exhibit showing the names and the locations of the mines of the complainants and the interveners in Docket No. 25656, and wish to introduce it as Exhibit 389.

(2535) (Exhibit 389, Witness Petersen, received in evidence.)

I have made a study to determine the amount of coal shipped from the Connellsville district for coking purposes as contrasted with the total shipment of coal from the Connellsville district. The publication issued by the United States Bureau of Mines entitled, "Coking By-Products in 1930," shows that there were shipped from the Connellsville field in 1930, 16,592,258 tons of coal to by-product plants for coking purposes. The United States Bureau of Mines publication enfitled, "Coal in 1930," shows that the [fol. 2363] production of the mines in the Connellsville field for 1930 was 27,768,000 tons. However, the Connellsville field as defined by the United States Bureau of Mines is not exactly the same as the Connellsville rate district, but includes certain portions of the Pittsburgh rate district. In order to determine the tonnage shipped by the mines included in the Government report that are within the Connellsville rate district, I have secured (2536) from the United States Bureau of Mines a list of all mines included in the Connellsville field as set forth in these publications, of the United States Department of Mines. After eliminating all mines outside of the Connellsville rate district I have secured from the Pennsylvania Bureau of Mnies the tonnage shipped from each mine in 1930. The total from all of the mines in the Connellsville rate district was 23,630,067

tons. This latter figure covers only coal shipped and does not include any coal consumed at the mines for coking or steam purposes. Deducting the 16,592,258 tons of coking coal shipped from the Connellsville field, as used by the United States Bureau of Mines publication, from the total of the coal shipped from the Connellsville rate district, as defined in the tariffs, there is a remainder of 7,037,809 tons. This figure undoubtedly understates the amount of coal shipped from the Connellsville district for other than coke purposes because, as before explained, the figure of 16,- [fol. 2364] 592,258 tons includes some tonnage shipped from the Pittsburgh district. Referring to Mr. Ackerman's criticism of my Exhibit 225, in which he stated there was but one locomotive in operation on the Monongahela Railway of a type used in my set-up of figures. (2537) I have a publication of the Monongahela Railroad which discloses the number of locomotives of the type used in my study in the operation of that road. This publication shows that there are ten.

Mr. Ballard: Would you mind giving the name or number of it?

The Witness: It is not a publication.

Mr. Keeler: I misused the word "publication". It is a series of charts and statistical compilations which is in use by the Monongahela Railway and which discloses the information which we seek. It is not a public document.

Mr. Ballard: May I look at it? (After looking at the document): No objection.

The Witness: This booklet indicates that there are ten of L-1 type of locomotives in use on the Monongahela Railway and six of the L-2 type of locomotives, the tractive effort of both types of which is 65,700 pounds.

(Narrative continued:)

I have secured from the publications issued by the Interstate Commerce Commission entitled, "Statistics of Railways in the United States," figures to (2538) show the average miles of haul and the average revenue per ton of [fol. 2365] freight for the Monongahela and Montour Railroads for the year 1930. For the year 1930, average miles hauled revenue freight, Monongahela Railroad, 32.9; Mon-

tour Railroad, 20.59; average revenue per ton of freight, Monongahela Railway, 35.481 cents; Montour, 36.968 cents.

Mr. Keeler: Mr. Examiner, I have asked for similar figures for the year 1931 from the Commission. I got a wire last night from Dr. Lorenz, but through an error in transmission of our telegram apparently, the information was furnished for the Montana Railway instead of the Montour, and I would like permission later to read those figures into the record from information furnished by Dr. Lorenz.

Exam. Trezise: That will be permitted.

(Narrative continued:)

I have some corrections to note in the record. On page 1524, about the middle of the page, the question by Mr. McVann reading, "It does not include captive", should read, "It does include captive?" And the answer, "Does not include captive," should read, "Does include captive." I don't think I have anything else.

Cross-examination.

By Mr. Ballard:

(2539) Referring to blueprint book, the other types of locomotives in service on the Monongahela Railway are the class G-1, there is just one of those. The tractive power is 23,160 pounds. Class H-5, there are 24 of those, tractive [fol. 2366] power, 44,100 pounds. There is one class here, one locomotive does not seem to be rated at all. That is type H-5 sup. There is just one of them. H-5; sa, there are 13 of those, and the tractive effort is 50,625 pounds. That is all. That gives a complete schedule of all of the locomotives in service on the Monongahela Railway. Information contained in the document I am now looking at shows the book was revised and retraced to September 15, 1930. (2540) So far as I know, it represents the present situation. I do not know anything with respect to the portions of the railroad over which these locomotives are used. I don't believe there is anything in here to indicate whether north or south of Maidsville.

Referring to the tonnages of non-coking coal computed by me, neither of the publications I referred to indicate the destinations of those shipments.

[fol. 2367] By Mr. Gutheim:

(2541) The 16,592,258 tons is a tonnage that might be said to have moved from the Connellsville district, speaking geologically. When I come to figure out the tonnage that moved from the Connellsville rate district for purposes other than by-product coking, I deduct that sixteen million (2542) odd from the twenty-three million odd that I say moved from the Connellsville rate district. So that in a way I am treating two totals of different areas, the first being a total of a geological area and the second being the total from a rate district, and to that extent the total shown as other than by-product coal is understated, because every mine included in the total of 23,000,000 tons is also included in the total of the 16,000,000 tons of coke coal. I should say that whatever the figures are, if they could be determined accurately, then, would bear out Mr. Boden's statement that in assigning all of the Connellsville production to gas and by-product coal he had overstated the gas and by-product coal production from that district.

By Mr. Bull:

On my exhibit 388, where I show the route of the B. & O. direct to Canton, that figure represents the distance set up by the B. & O. as their distance from Bellaire to Canton.

[fol. 2368] By Mr. Ballard:

(2543) The Canton route, 144.3 miles is B. & O. direct via Warwick and Akron. The two routes immediately above are both via Warwick but they are not both via Akron, because Lorain would be the movement west of Warwick and Cleveland would go east of Warwick. Then Lorain would be via Warwick, Sterling and Elyria.

By Mr. Keeler:

That is my assumption of how the B. & O. mileage has been computed as set up in their tariff. I have taken the figure as shown in their tariff from Bellaire to these points as the basis of my statement of the distances as shown in the exhibit.

By Mr. Ballard:

2544) The route of the Cleveland mileage I think is through Warwick and Akron. The route of the Canton mileage of 102.3 miles, is B. & O., Justus and W. & L. E. The next one, Akron, B. & O. direct, 125.1 miles, I believe is via Warwick. The next Massillon is B. & O. direct. The last figure in that block of figures, 144 is the distance from Bellaire to Youngstown. I don't think there is any question about the routes from Glenwood Junction, they can move only one way.

Mr. Ballard: If there is any question I will ask Mr. Keeler.

Mr. Keeler: All we know about it is these are B. & O. (2545) distances set up in the tariffs to those points, and [fol. 2369] the witness is indulging in assumptions that the routes he has indicated are the routes the B. & O. has used in setting up their distances.

Mr. Ballard: Of course it is equally true there may be shorter distances between these points than shown in the B. & O. tariffs?

Mr. Keeler: I am not advised one way or another on that.

By Mr. Bull:

The distances from Bellaire, the actual figures shown on Exhibit 388, are the figures which I took out of the B. & O. tariff shown and I did not make any independent calculations of my own from that tariff.

Mr. Ballard: Mr. Keeler, have you any objection to stating why you put that exhibit in?

Mr. Keeler: The only reason we put it in was that we attempted in our original presentation to support all the through mileage figures we introduced with the sub-figures that were used in building up those mileages.

Mr. Ballard: You are not correcting any of our figures?

Mr. Keeler: No. We found after we got to the hearing there was this void in supporting data and we asked permission to fill it in.

By Mr. Burgess:

(2546) In connection with Exhibit 388, the distance of

[fol. 2370] 144.3, from Bellaire to Canton, B. & O. direct, I stated was figured via Warwick and East Canton. The rate tariff shows the route B. & O. direct, it does not indicate through what junctions the traffic might move. I was not present when statements were made on the record by counsel for the B. & O. and yourself as to that matter.

[fol. 2371] GEORGE DURHAM was recalled as a witness, and having been previously sworn, testified as follows:

Direct examination.

By Mr. Martin:

(2547) Referring to my statements in response to a question by Mr. Day, that I would have the matter checked as to whether Account 336, maintaining joint equipment at terminals debtor, included car repairs, several days' time would be required for the analysis of this account, but it is unlikely that it contains any charges for car repairs. That account includes a proportion of the cost of repairs to locomotives in joint service at terminals. My last two answers are also applicable to Account 357, maintaining joint equipment at terminals credit.

I have had the matter checked as to whether any cars of the Goodyear Tire & Rubber Company were used during the year 1931, and find that no cars of that company were used during the year 1931 for the transportation of coal from the Ohio No. 8 district.

(2549) The tractive power of locomotives Series 4301 to 4320 is 43,031 pounds. The series of locomotives used on the Sherrodsville Branch and their tractive power are as follows: Series Nos. 3552, 3556, 3557, 3563, tractive power, 33,312 pounds. The first four numbers I read are individual numbers of locomotives. Locomotives 3574, 3575, tractive power, 35,700 pounds. Locomotive- Nos. 4101 to 4156, tractive power 41,360 pounds. That latter number is in-

[fol. 2372] clusive.

In accordance with the request of Mr. Day for a statement showing the distance from potential mines to assembling points, I have prepared such a statement and file it as Exhibit 390.

(Exhibit 390, of Witness Durham, received in evidence.)

(2551) I have before me Exhibit 357. It is a fact that none of the mines shown on my Exhibit 390 are included in Column 1 on Exhibit 357 (2552), which shows the mines at which coal was produced during the period covered by my cost study. It is also true that all of the mines shown on my Exhibit No. 390 are included in Column 2 of Exhibit 357, which shows the mines on Supplement No. 1 to the List of Coal Mines of Operators No. 16 of our company, dated April 20, 1932. It is correct that there are some mines in Column No. 2 on Exhibit No. 357 which are not shown in Column 1 of that exhibit and are likewise not shown on my Exhibit 390. Wykega Mine in Column No. 3 does not show in either Column 1 or Column 2, Dale Mine being the same as Wykega Mine. Maher No. 6 Mine, which shows in Column 2 on Exhibit (2553) 357, is not shown on Exhibit 390, for the reason that we have found that the tipple at this mine has been dismantled, the tracks and other materials removed from the mine, and there is no probability of its ever being reopened.

[fol. 2373] By Mr. Day:

The railroad mine tracks have not been taken up, but I have been told by Mr. Joseph Pursglove, of the Pursglove Mining Company, that the tipple has been dismantled and the tracks have been taken out of the mine, and he purchased the second hand material from the tipple and mine track inside of the mine. The railroad connection is still there, because that is a matter of taking it up whenever it is convenient. The mine, however, will not be operated, as I understand it. My understanding is that the coal will probably be taken out by the B. & O. on the other side of the hill, what coal is left in the mine. X-L Mine, which is shown as No. 29 and appears in Column 2 of Exhibit 357—one of our officers yesterday was told by Mr. Andrew Neff, president of the Neff Coal Company, which formerly operated this company, that the coal has all been worked out of this (2554) mine except the pillars, and that there is no probability of any further operations at that point. Rexford Mine appears in both Columns 2 and 3 of Exhibit 357 and does not appear on Exhibit 390. The reason for this is that there is no assembling service from this mine. The coal is picked up by road crews or puller crews and handled direct.

[fol. 2374] By Mr. Martin:

That is an actual producer at the present time, and was an actual producer during the period of our cost study. The Nicholson Mine No. 1, which is shown in Column 2 and is No. 31 on Exhibit 357, has been abandoned, so we are informed by Mr. Nicholson, president of the company.

Referring to Exhibit 390, there are track connections between our main line or branch rails and the six mines shown on that exhibit. I would not go so far as to say that the track leading to the New Pittsburgh No. 81 Mine is in condition for immediate use without some repairs, but the tracks are still in there with that qualification.

By Mr. Bull:

(2555) There are tipples at all of the six mines. I am not able to state the state of repairs is first class, but there are tipples at all of them. I think the same qualification will go to the tipple as I have made with respect to the tracks. They have been idle since 1927 and in one instance since 1924, and I don't imagine there is a great amount of money spent in upkeep on them.

Cross-examination.

By Mr. Day:

Referring to Exhibit 357. (2556)

Maher No. 6 and X-L mines are some distance from the assembling point, but Nicholson No. 1 is approximately at the assembling point. X-L and Maher No. 6 were located at or near Neffs on the extreme end of the Neffs Branch [fol. 2375] before they were abandoned. The physical location of the mine would remain unchanged, but it is not a mine any more when it is abandoned. I don't know of any other points referred to in detail on Exhibit 357 that are now in the same condition as XL and Mayer No. 6. I inquired particularly with respect to Adena No. 1 and Tasa, because I had some doubt about it, and we have been told by the officers of the company operating those mines that they still have coal (2557) and expect to operate them some time if they keep their freight rates and have a market. It is not true that the mines which have been abandoned or dismantled are those at the extreme end of our branches, be-

cause Nicholson No. 1 was right at Pine Valley, as I have already told you. Then in turn I was talking about Nicholson No. 1, which was right at Pine Valley, I don't think there are any such instances as X-L and Maher. I would not say that all other mines located in the vicinity of Pine Valley and Adena and Kenwood, etc., are in operation, but I say they are potential shipping points.

The actual producing mines shipping coal, are shown on the active mine list, that is shown in this Column No. 3, Exhibit 357. (2358) Every one of the mines shown in that Column No. 3 may not be shipping coal today, but they have been in operation within the last few months. The O. & P. No. 4 Mine is in operation, and is the largest mine on the railroad. Dillon No. 1 mine is in operation and is another [fol. 2376] large mine. I think the Maple Grove Mine are working, and also the Stellar Mine.

By Mr. Bull:

Referring to the first line of the heading of Exhibit 390, "Statement Showing Mines at Potential Shipping Points," I have considered the potential shipping point, the mine as shown on the extreme left hand column.

By Mr. Gutheim:

(2359) The only rule which I followed in determining what the conditions were as to the mines being abandoned or not, is the statement made by the officer in charge of the property. If he said they expected to reopen the mine at some time, I considered it a potential mine. I would say that if there had been a case where the mine tipple had been taken out and the railroad connections had been taken out, I would have been governed by that, but in each case where I have discussed it with the officers of a company or have caused it to be discussed by some officer of our company, it has been a case where the tipple was still in existence and there were still mine tracks. In the absence of a general rule to enable me to make such determination, it is the fact that in one or more cases I took into consideration information given me by the operator. I also took into consideration information respecting the physical condition of the tipple, its existence or its non-existence. I also took into [fol. 2377] consideration the existence or non-existence of

the tipple tracks. I already said that if we had had an instance where there were no track connections, railway track connections, I mean, to the mine, where that had been taken up and no request had been made to reinstate it, I probably would have considered that there was no prospect of an operation, but I did not happen to have that particular situation. In the absence of a general rule that would determine the status of any individual mine, it was necessary for me to take into consideration one or more of these various factors.

Redirect examination.

By Mr. Martin:

(2560) I took those into consideration in order to arrive at the intention of the officers of the mining companies or their apparent intention as to the abandonment of their mines, and it would be my understanding that abandonment is a matter of intention. (2561) I would be unable to go behind an expression of intention by the officers of the coal company, so long as there was no physical evidence that that expression was not correct.

When Mr. Day asked me if the gross ton miles shown in Column 3, Page 9 of Exhibit 146 included non-revenue freight, I answered that it did. The gross ton miles resulting from the transportation of non-revenue freight could not have been excluded for the reason that such gross ton [fol. 2378] miles are not compiled separately. As reported to the Interstate Commerce Commission for the years 1930 and 1931, the total ton miles were 2,606,103,026. The non-revenue tons were 94,113,399, or 3.6 per cent of the total.

In arriving at the assembling costs and station expenses in my cost study, I used revenue carloads only. That has the effect of requiring revenue freight (2562) to absorb all of the assembling costs and station expense incident to the handling of non-revenue freight. The only part of the cost of handling non-revenue freight not so absorbed is that pertaining to line haul and terminal delivery service.

There are elements in the cost study which offset the fact that I have not absorbed the cost of line haul and terminal delivery service of non-revenue freight. As I explained at pages 1025 and 1026 of the record, there was considerable overcharge in the assembling cost, due to the use of $20.30

per train hour shown opposite Item D in Column 4, Page 9 of Exhibit 146; First: By reason of the fact that the average tractive power of the locomotive used in assembling service was approximately 26 per cent less than the average tractive power of locomotives used in freight service; and second, that the crews working in assembling service are paid relatively less overtime than crews working in all classes of road freight service. These overcharges [fol. 2379] in the assembling service amount to approximately 2.9 cents per ton of coal transported. I further testified at Pages 1023 and 1024 of the record that the charges to transportation of coal for locomotive fuel were overstated, because no (2563) recognition was given in the study to the relatively lower consumption of fuel for moving heavier tonnage trains. In my opinion these overcharges in this study would more than offset any small undercharge resulting from the particular inclusion of non-revenue freight. By that partial inclusion, I mean as to line haul and terminal delivery service.

Recross-examination.

By Mr. Bull:

There are places on our railroad where coal is brought by wagon and placed in the car instead of being dumped from the tipple. Wykega Mine operates to some extent in that way, but I think we would have to consider that as a potential shipping point. I think that was Dale and Wykega that I stated the other day had been included in my cost study where some business had been trucked over and dumped into the car. They are both the same mine. I think you would have to consider that, as presently advised, a potential shipping point.

By Mr. Martin:

(2564) That is included in Column 1 under the heading of "Dale". It was treated as an active mine for the purpose of the cost study.

[fol. 2380] By Mr. Ballard:

It is included in our list of mines in our published mine circular. That is true generally of our wagon mine shipping points, that they appear in our mine list.

By Mr. Day:

The use of the locomotives in the 3500 series and 4101 to 4156 is not confined to the Sherrodsville Branch. We use some of those locomotives on the south end of the Cleveland Division, and I think occasionally on the branch up to Chagrin Falls. None of the other numbers on our line is included in the line from Pine Valley to Cleveland. (2565) By the south end of our Cleveland Division, I mean the portion of the line between Harmon and Zanesville.

[fol. 2381] H. J. ADELL was recalled as a witness and, having been previously sworn, testified as follows:

Direct examination.

By Mr. Martin:

(2565) In connection with my Exhibit 200, statement showing rates and earnings on bituminous coal, carloads, from mining points on the Wheeling & Lake Erie Railway and the No. 8, Middle and Massillon Districts of Ohio to Canton, Ohio, compared with other rates on bituminous coal, carloads, prescribed by the Interstate Commerce Commission for relative distances, it was requested that I furnish the tariff authorities for the mileages shown in Column 3 (2566), covering rates from Griff, Indiana, to Conlogue, Illinois, Macksville, Indiana, to Mays, Illinois, Griff, Indiana, to Dudley, Illinois, and Griff, Indiana, to Paris, Illinois, and Macksville, Indiana, to Paris, Illinois.

(2567) The mileage authorities are Big Four I. C. C. 8515 and Pennsylvania Railroad I. C. C. 398. In connection with the mileages shown I would like to refer to the Commission's report and order in 167 I. C. C. Docket 20965, Frank B. Clinton, et al. vs. B. & O. Railroad Company, et al. (2568) and at Page 295 most of the distances are there shown.

Cross-examination.

By Mr. Day:

I don't believe I put in the distance from Griff or Macksville to Vermillion. I would not say I left out the short

haul. I thought it was perfectly clear on the record that the reason I did not use Griff to Vermillion was due to the [fol. 2382] fact that the distance involved was not comparable to the distances we were using in our study or in our rate exhibit. If I remember correctly the distance was about 12 miles.

May I make another statement that perhaps will clear the record? I have re-checked all of the I. C. C. reference authorities shown on these various rate exhibits, 196, 197, 198, 199, 200 and 201, and find that the mileages stated on these exhibits are shown in the Commission's decisions cited in the last column of those exhibits, with the exception of the ones I previously mentioned (2569-72).

[fol. 2383] (2572) Mr. Ballard: If Mr. Martin is through I wonder if Mr. Kern could give me at this time the tariff reference that was promised yesterday in connection with the Pennsylvania mine list.

Mr. Kern: PRR AA ICC 2035. It is the same one Mr. Boden cited, I believe.

Mr. Ballard: May I ask Mr. Kern some questions about that tariff?

Exam. Trezise: Proceed.

Roy S. Kern was recalled as a witness, and having been previously sworn, testified as follows:

Cross-examination.

By Mr. Ballard:

I have AA 2035 before me. It is correct that my Exhibit 38-A shows 753 tariff origins on the Pennsylvania Railroad in the Pittsburgh district, and that one of my other exhibits showed the active mines, and was compiled by means of questionnaires served on the carriers (2573), for the purposes of this case, whereas the all-tariff origin list was taken from the tariff I just referred to. It is true that in the all-tariff origin list there are either mines or locations of mines not included in the active mine list, necessarily so in the variations. There are probably some stations that are not mines. There is no way for Tariff AA 2035 to identify the existing mines that are not in-

cluded in my own mine list. As to furnishing that for the record, I would first have to consult the Pennsylvania [fol. 2384] Railroad to find out if it is available. I don't know.

(It was therefore agreed that on the following Monday morning Mr. Orcutt would inform Mr. Ballard whether or not such information would be furnished.) (2573-4.)

Mr. Keeler: Mr. Examiner, I have a wire from the Commission which gives the data which I asked permission to read into the record while Mr. Petersen was on the stand. May I have him read those additional figures in the record at this time?

Lawrence Petersen was recalled as a witness and, having been previously sworn, testified as follows:

(2574), Direct examination:

The Witness: 1931, average miles hauled revenue freight, Monongahela Railway, 36.2; Montour, 20.7. Average revenue per ton of freight, Monongahela Railway, 35.829; Montour, 36.549 cents (2574-78).

[fol. 2385] Roy S. Kern was recalled as a witness and, having been previously sworn, testified as follows:

(2579) Direct examination.

By Mr. Orcutt:

Referring to the fact that at pages 164, 169 and 171 of the record for the hearing on December 13, 1932, I obtained permission to file Exhibits 47-A, 48-A and 49-A, showing the movement of coal from Ohio districts and the Crescents to Mansfield, Ohio, over a period of years, I have those exhibits prepared and I offer them at this time.

(Exhibits 47-A, 48-A and 49-A, Witness Kern, received in evidence.)

These exhibits are prepared in identically the same form as the original exhibits. 47-A shows the movement from

origin districts in Ohio to Mansfield, for the calendar years 1922 to 1931, inclusive; 48-A, the movement from the Pittsburgh, Connellsville, Fairmont and all (2580) other Crescent districts for the calendar years 1922 to 1931, inclusive. Due to the fact that the same source of the information, the reports of the Ohio Bureau of Coal Statistics, did not show separate figures for Mansfield prior to the year 1926, it was not possible to make this exhibit correspond as to time with 47-A. 49-A shows the totals of the movements from the Ohio districts and the Crescents to Mansfield for the years covered by 47-A and 48-A. I don't believe that these exhibits require any special comment.

[fol. 2386] Referring to Exhibits 79 to 83, inclusive, introduced by Witness Joseph R. O'Malia, showing a number of rates, distances and ton mile earnings which indicate a substantial parity in the levels of Ohio intrastate rates prior to the reductions of August 1, 1932 and subsequently, and interstate rates in the same general territory, I have prepared an exhibit supplementing those of Mr. O'Malia and showing the situation with respect to interstate rates from the No. 8, Cambridge and Middle Districts on the Pennsylvania Railroad to a number of destinations in Pennsylvania, New York and West Virginia, including Erie, Corry, Oil City and Warren, Pennsylvania, Dunkirk, Mayville and Brocton, New York, and Weirton, Wheeling and Benwood, Virginia (2581), and offer it as Exhibit 391.

(Exhibit 391, Witness Kern, received in evidence.)

The purpose of this Exhibit is to show the rates, distances and earnings per ton per mile from the indicated districts on the P. R. R. to important destinations in the states referred to as properly comparable with rates for similar distances from the same origin districts to the destinations in northeastern Ohio involved in this proceeding. I believe the exhibit indicates that all things considered the existing depressed Ohio intrastate rates to Cleveland, Huron, Lorain, Akron, etc., are substantially lower than the interstate rates in the same general territory.

[fol. 2387] Mr. Graves' Exhibit 94 is a chronological statement of rates from various origin districts to the principal (2582) points of destination in northeastern Ohio in-

volved in these proceedings, and in so far as it covers the same origins and destinations as are set forth in my rate histories, Exhibits 23 to 32, inclusive, and Exhibit 41, constitutes a duplication. His Exhibit 95 is a statement of average distances via all tariff routes from the No. 8, Freeport, Pittsburgh, Connellsville and Fairmont districts to representative destinations in northeastern Ohio. To the extent that he has used distances contained in my Exhibits 38 and 33, the same are subject to the corrections I have made in such. His computations from the Fairmont district differ from mine to the extent that he has not considered the entire Fairmont rate group as recognized in the rate adjustment to northeastern Ohio and has included only the groups known as Fairmont Nos. 1 and 2, Opekiska, Monongah, Short Line and Clarksburg districts, whereas my computations included also origins in what are sometimes referred to as the Belington, Upshur, Junior and Roaring Creek districts. I might say in order to clear up some controversy about that, that when we speak of Fairmont we ordinarily refer to all of the districts I have indicated, but I believe a more correct and precise term is northern West Virginia.

[fol. 2388] I have examined the testimony of Witness A. S. Boden. At pages 576 and 577 of the transcript of hearing (2583) on December 16, 1932, Mr. Boden is recorded as saying that the carriers, meaning, I believe, lines which protested against and sought suspension of the tariff of the P. & W. V. Railway proposing reduced rate of $1.55 from the Pittsburgh district to Cleveland, which is involved in I. & S. Docket 3801, assumed the position that "reductions in rates from western Pennsylvania would be a needless sacrifice of revenue because much of the coal moving from western Pennsylvania is of the gas and metallurgical variety which is not produced in Ohio". Subsequently he states that I advanced this argument as spokesman for the protesting carriers at a hearing held before the I. C. C. Suspension Board shortly before the issuance of I. & S. Docket 3801. I desire to emphatically deny that I made any such statement or that the protesting carriers at that hearing, or before or after it, have ever to my knowledge contended that rates from origins in western Pennsylvania should be on a higher level than from the Ohio No. 8 district because of the differences

that might exist in the qualities of the coals produced or the uses to which they might be put. The statement I made before the Suspension Board was previous to the hearing reduced to writing, and since Mr. Boden's testimony I have carefully examined it and find no reference whatever to the position he said I took. In several of Mr. [fol. 2389] Boden's exhibits, particularly (2584) Exhibits 102 and 103, he has shown distances and various combinations of distances from origins to destinations involved in these proceedings. Because, however, he has not indicated specifically the origins from which his distances were figured nor the specific routes he used, it has been impossible to check his figures. I find, however, by comparing his figures with the average distances from all tariff origins as contained in my Exhibits 33 and 38, that we check out quite closely. For example, he shows the average distance from the Ohio No. 8 district via all routes to Cleveland as 155 miles and my exhibit shows 159.4 miles. His corresponding figure for the Pittsburgh district is 174 miles and mine 172.7 miles. Undoubtedly, the variations, although slight, are due to the fact that we have not in all instances used the same points of origin. In Mr. Boden's Exhibit 116, entitled, "Statement Showing Distances and Rate from the Pittsburgh District to Youngstown; With the Rates for Similar or Greater Hauls from Other Districts to Various Ohio Destinations", he has taken the Pittsburgh to Youngstown rate of $1.34 for an average distance of 99 miles and compared it with various rates applicable on Ohio intrastate traffic, such as from the No. 8 district to Akron, from the Cambridge district to Akron, Canton and Massillon, etc. The average of all of the distances for [fol. 2390] rates with which the Pittsburgh to (2585) Youngstown, Ohio rate is compared is 109 miles, and the average of the rates $1.20. In order to present a correct picture of the situation I have prepared and offer as Exhibit 392, a statement showing the same information as appears upon Mr. Boden's Exhibit 116, with the addition of a column showing the applicable Ohio intrastate rate as of July 31, 1932, which is the present interstate rate.

(Exhibit 392, Witness Kern, received in evidence.)

It will be observed that the average of such rates is $1.45 for the average distance of 109 miles, which com-

pares favorably with the Pittsburgh to Youngstown rate of $1.34 for an average distance of 99 miles. Incidentally, the figure of $1.21 appearing upon the exhibit in parentheses is a correction on Mr. Boden's average rate of $1.20. I believe that the showing made by using the rates which the carriers contend are proper for the Ohio intrastate movements shown upon the exhibit further proves the existing approximate parity in the levels of rates on coal from the eastern Ohio and western Pennsylvania districts to destinations in northeastern Ohio and that the reductions made in the Ohio intrastate rates have disrupted this parity to the prejudice of the interstate adjustment.

Mr. Boden's Exhibit 106 purports to show average (2586) distances from the so-called Southern Crescent dis-
[fol. 2391] tricts to destinations in northeastern Ohio, but I have been unable to verify their accuracy due to the fact that no data has been introduced showing either the origin points from or the routes via which the distances were computed.

I have analyzed Witness Eldridge's Exhibit 131 and his testimony in regard thereto as it appears on Pages 835 and 836 of the transcript of record for December 20, 1932. This exhibit, as explained by Mr. Eldridge, purports to show typical instances where rates on coal from the Freeport district are made lower than rates from the Pittsburgh district. The exhibit, although Mr. Eldridge states it does not begin to cover all of the points in C. F. A. Territory where Freeport is given lower than the Pittsburgh rates, nevertheless exaggerates considerably the true situation. Rates from the Freeport district to destinations within the C. F. A. west bound coal rate adjustment as distinguished from the north bound adjustment, are lower than the Pittsburgh district rates in but two important instances, namely, the rates to Wyandotte, Michigan, which are 20 cents lower than Pittsburgh, and to Chicago, Illinois, which are 10 cents lower than Pittsburgh. Mr. Eldridge has shown numerous destinations on the C. & N. W., C. B. & Q., C. G. W., C. M. St. P. & P., C. S. S. & S. B., E. J. & E. and I. C. Roads (2587) which take the Chicago rates or are constructed by means of adding arbitraries to the Chicago rates as fixed by the Interstate Commerce Commission in the Chicago Coal Merchant's Association, Cases 73 I. C. C. 161 and 151
[fol. 2392] I. C. C. 21.

In this case the Commission required that rates to Chicago suburban territory, such as stations on the C. & N. W., C. B. & Q., C. M. St. P. & P. and I. C. Roads, appearing in Mr. Eldridge's exhibit, be made by adding to the Chicago rates fixed arbitraries. For a long time these arbitraries were published in a separate tariff issued by Agent Galligan of the Illinois Freight Association, but due to technical objections raised by the I. C. C. to such it was necessary some time ago to publish joint through rates reflecting the arbitraries over the Chicago rate to all of the destinations in what we call the "Chicago suburban area". Thus the existence of specific rates from the Freeport district to all of such points lower than from the Pittsburgh district rates, is directly attributable to the low Freeport rate to Chicago. Again, many of the rates shown upon the exhibit, such as B. & O. Railroad stations Gary to South Chicago, N. Y. C. Railroad stations Gary to La Porte and South Bend and Mishawaka, Nickel Plate stations Burr Oak to Hammond, are intermediate to Chicago, and the long and short haul clause prevents the establishment of higher rates than the depressed rate to Chicago.

(2588) At this point I want to call attention to Mr. Boden's Exhibit 374, in which he has shown instances where the Pittsburgh district rates on lines other than the Bessemer & Lake Erie, are lower than the Freeport dis-[fol. 2393] trict rates of the Bessemer & Lake Erie, which, as Mr. Eldridge has shown, are higher than the Bessemer & Lake Erie Pittsburgh district rates. By way of explanation, I might state that the rates appearing upon Mr. Boden's exhibit in the column at the right were published in order to meet rates which were originally established in connection with the E. J. & E., and for a long time the E. J. & E. had a lower basis of rates on Crescent coal than the carriers which reached common points, such as Elgin, Joliet, etc. Some two years ago this competitive situation became such that the C. & N. W. and the Burlington, etc., had to get competitive rates, and consequently all of the Crescent carriers with the single exception, I believe, of the Bessemer & Lake Erie, had those competitive rates. Presumably the reason the Bessemer did not publish them is that they did not want to add any more to their paper rates contained in their tariff.

(2589) Continuing my discussion of Eldridge Exhibit

131, as to the points of destination on the D. & T. S. L., D. T. & I., N. Y. C. and P. M. roads taking Freeport district rate of $2.40, which is 20 cents less than the Pittsburgh district rate, I desire to call attention to the fact that this depressed rate is not published to any stations where the long and short haul provisions of the Act do not require it. In other words, the carriers publish the rate to Wyandotte, [fol. 2394] and only such directly intermediate points as were necessary to avoid a Fourth Section violation. Mr. Eldridge shows a Freeport district rate to Detroit, Michigan, via the P. M. Railway of $2.40 which I do not check. According to B. & L. E. Railroad Tariff I. C. C. 972, referred to in his exhibit, the rate to Detroit via all routes, including the P. M. Railway, is $2.60 net ton, the same as from Pittsburgh. From these observations it will be noted that the depressed rates from the Freeport district to both Chicago (2590) and Wyandotte have been confined, with the exception of certain instances, via the routes of the Erie Railroad and Nickel Plate Road to Chicago to only intermediate points where the Fourth Section requires it, and to Chicago suburban territory as the result of orders of the Interstate Commerce Commission making the rates on arbitraries over Chicago.

The balance of the destinations appearing upon the exhibit are in what we call the "northbound adjustment" obtaining to the territory extending from Ashtabula, Ohio, on the west to Rochester, New York, on the east. Here rates from the Freeport district are made differentially 10 cents per ton under Pittsburgh, which is attributable largely to the fact that the distances to this territory from the Freeport district are considerably less than from Pittsburgh, whereas west bound, as appears from distances I have submitted in these proceedings, are substantially the [fol. 2395] same as the Pittsburgh distances.

This 10 cent differential which Freeport takes under Pittsburgh north bound is general, but to Erie, Pennsylvania and Conneaut Harbor, the Bessemer & Lake Erie publish a local adjustment making the Freeport district rate $1.58. That has been extended only to include competitive destinations on the New York Central and Nickel Plate. Those two points are local to the (2591) Bessemer & Lake Erie.

I have made a careful study of the records of the carriers concerning the reasons underlying the establishment of lower rates from the Freeport district than from the Pittsburgh district to Wyandotte and Chicago, and find that they are the result of special circumstances, and by no means are an admittance on the part of the carriers that the Freeport district is entitled to anything less than the Pittsburgh district rates west bound. As was testified to by Mr. Eldridge, the Inland Steel Company with plants in the Chicago district and the Michigan Alkali Company at Wyandotte, Michigan, own and operate, through subsidiary companies, mines on the B. & L. E. Railroad in the Freeport district. According to the carriers' records one of the considerations which prompted these companies to acquire coal properties in the Freeport district was an offer of lower than the Pittsburgh rates. From a strictly railroad standpoint such were justified on the premise that [fol. 2396] unless the rates to Wyandotte and Detroit were made lower than the standard basis, all the traffic would move entirely via rail to Conneaut Harbor, thence lake, and the rates may therefore be considered as water compelled rates. It appears in this record that the lake cargo coal rates from the Freeport district to Conneaut Harbor are made 15 cents under the Pittsburgh district (2592). Of course if the all-rail rates are to be made competitive with the lake cargo coal rates or were ever competitive with them, naturally they should be less than the Pittsburgh district rates by approximately the same amounts. In the instance of the rate to Detroit, another factor entered into the situation; namely, the through rail and lake rate, which was that first published. The reductions via the all-rail route were made merely to meet the rail and lake through rate, and have since been maintained on a parity therewith. Incidentally, the rail and lake route which appears in B. & L. E. Railroad Tariff I. C. C. 972 is via B. & L. E. Railroad Conneaut Harbor L. E. N. Company, Ltd., Erieau, Ontario, thence P. M. Railway, is considerably shorter than any of the all-rail routes to Wyandotte.

From a tonnage standpoint, the movement of coal from the Freeport district on the B. & L. E. Railroad to destinations west of the M. & S. Valleys and the Cleveland group is confined almost exclusively to Wyandotte, Michigan. In

1931, 60,510 tons moved to Wyandotte, which is many times [fol. 2397] the tonnage to all the balance of the territory combined. Incidentally, although I do not have available the figures, the bulk of the tonnage from the captive properties of the Michigan Alkali Company and the Inland Steel Company now move to Wyandotte and the Chicago district via Lake, notwithstanding the depressed all-rail rates to such (2593) points.

Until recently there was another rate in there in connection with a car ferry, but I understand that car ferry has been definitely abandoned and I believe Mr. Boden so testified.

[fol. 2398] (2594) Mr. Eldridge's Exhibit 136 shows a number of origin points on the B. & O. Railroad in West Virginia and distances therefrom to Wheeling, West Virginia. It shows an average distance of all such points of 88.4 miles, for which the rate is $1.13 net ton. Mr. Eldridge, however, failed to note that Wheeling, West Virginia, is situated on the Ohio River and that the rate of the B. & O. Railroad is depressed to meet competition with water-borne coal. Incidentally, this competition is such that notwithstanding the low level of the rate the important coal tonnages to Wheeling move by water and the rates cited move little, if any, tonnage.

On Page 852 of the record Mr. Eldridge cites a rate of $1.01 net ton applicable from the B. & O. Railroad Jackson County district to Portsmouth, Ohio, for a distance of 84.2 miles and states that it applies from mines in the vicinity of Athens, Ohio. This rate is a part of a short haul adjustment in which the B. & O. Railroad Jackson County (2595) district is divided into three sub-groups taking rates of 76 cents, 88 cents and $1.01. They are undoubtedly low because of competitive conditions existing at Portsmouth, to which coal may move by water. Rates from the Crescent districts on the C. & O. and N. & W. Roads to Portsmouth are extremely low water compelled rates, and it is a combination of the water and southern rates which has compelled maintenance of the low Jackson County rate referred to by Mr. Eldridge. Incidentally, from a traffic [fol. 2399] standpoint the rate is of but little importance and moves little, if any, tonnage. The important movements of coal to Portsmouth are via the C. & O. and N. & W.

Roads or via river. As a matter of fact, the entire production of coal at mines in the Jackson County district on the B. & O. Railroad in 1931 was less than 225,000 tons, and in 1930 about 207,000 tons. This tonnage is but a fraction of the coal requirements of Portsmouth.

Mr. Eldridge's Exhibits 139 and 140 are corrections to my Exhibits 33 and 36 through the use of routes from B. & O. Railroad No. 8 district to Canton via Dover and Valley Junction. Because these corrections do not conform precisely with my re-check of the mileages, I do not adopt such but refer to corrections to my Exhibits 33 and 36 introduced previously at this hearing.

(2596) I have reviewed the testimony and Exhibits of Witness Adell which are numbered 164 to 173, inclusive. Mr. Adell in these exhibits computes distances from mining points, from mines and shipping points, and from active mines on the W. & L. E. Railway to Cleveland, Lorain, Huron, Akron, Canton and Massillon via the shortest possible routes in connection with the W. & L. E. Railway. To these I desire to offer the general criticism that such do not reflect the transportation services in terms of miles which are actually performed, or which the W. & L. E. Railway [fol. 2400] and its connections hold themselves out to perform, in moving coal from the origin districts on the W. & L. E. Railway to the destinations cited. It is the position of the railroads for which I speak that the only proper method of computing distances for use in conjunction with the testing of bituminous coal rates which are grouped both as to point of origin and destination is the average of all tariff routes. Had Mr. Adell shown in these or other of his exhibits distances so computed he would have arrived at mileages considerably in excess of those shown. Such information is set forth in detail upon my distance Exhibits 33, 34, 35, 36 and 37.

I have examined Witness Adell's Exhibits 174 to 183 inclusive (2597), and I believe they are susceptible to the same general criticism, as Exhibits 164 to 173, inclusive. In this series he has undertaken to compute distances via the shortest tariff routes of each carrier serving mines in the Ohio No. 8, Middle and Massillon districts. I have noted, however, that on Exhibits 187, 188 and 189, he has shown on Page 2 of each a route from certain mines on

the W. & L. E. Railway in the Middle district to Massillon, Ohio, via W. & L. E. Railway Canton and B. & O. Railroad. A check of the applicable tariff showed that no through rates are published from any mines on the W. & L. E. Railway in the Middle district to Massillon via this route. On Exhibit 188, Page 3, a route from W. & L. E. Railway Middle district origins to Canton via Massillon [fol. 2401] and B. & O. Railroad appears. This route is not named in the tariff.

In commenting upon his Exhibit 174, Mr. Adell, at Page 1338 and succeeding pages of the record mentioned variations in distances from joint mines via each of the carriers serving the same, and he characterized the longer of such routes as abnormally circuitous. An analysis of his own figures fails to disclose such abnormality; for example, from Maher No. 6 Mine the abnormal route of the B. & O. Railroad to Lorain is but 10 miles or 6 per cent circuitous, whereas to Huron it is 17 miles or 10 per cent circuitous. From Maher No. 9 Mine the circuitous (2598) route of the B. & O. Railroad is but 13 miles or 8 per cent longer than the direct route of the W. & L. E. Railway. These instances, I believe, are sufficient to show that the differences in distance to which he called attention were in most of the instances he cited trivial rather than indicative of abnormal circuity.

In general comment, I would say that Witness Adell's Exhibit 194 is a statement of rates and mileages from origins on the W. & L. E. Railway to destinations on that line taking the Cleveland, Huron and Lorain reduced rates, and destinations on the A. C. & Y. Railway taking the Akron reduced rates. This, I believe, is a clear example of the fallacy of endeavoring to apply a mileage scale to a group rate adjustment. His picture, however, is confined [fol. 242] only to the situation on the W. & L. E. Railway and A. C. & Y. Railway as it obtains from W. & L. E. Railway origins. An exhibit which would treat with the entire Cleveland, Lorain, Huron and Akron rate groups from all origin districts via all recognized tariff routes would show that mileage as a basis for determining group rates is impossible. It is the position of the carriers, respondents in Docket 25566, that there should be no disturbance in either the origin or the destination group rates and group rate relationships, which will necessarily and automatically re-

sult from the use (2599) of mileage or a mileage scale as the sole basis for the determination of the rates.

I repeat that an exhibit which would treat with the entire Cleveland, Lorain, Huron and Akron rate groups from all origin districts via all recognized tariff routes would show that mileage as a basis for determining group rates is impossible.

Mr. Adell's exhibit would also give the impression that Cleveland was the most distant point in the Cleveland destination rate group. This is true only so far as the W. & L. E. Railway is concerned, but that line as well as other carriers serving the eastern Ohio coal districts name the Cleveland rate to destinations east of Cleveland to and including Perry, Ohio, a distance of 34.4 miles. As applied to the Cleveland group, therefore, not only would (2600) a strict application of the mileage scale disrupt the group [fol. 2403] by reducing rates to intermediate points, but it would also cause increases to destinations beyond Cleveland.

Exhibit 195 compares the reduced Ohio intrastate rates with ex-river coal rates from points on the Ohio River to Cleveland, Lorain, Canton and Massillon and the Mahoning and Shenango Valleys. I desire to state that the carriers for whom I here speak believe that these rates are too low and are the result of a misunderstanding on the part of the Interstate Commerce Commission. They now have petitions pending in I. & S. Dockets 3282 and 3619 seeking the reopening of these cases in the hope that they will be able to convince the Commission that the rates should be substantially advanced so as to conform more nearly to the level of rates from origins in the Pittsburgh, Connellsville, Fairmont and related districts to destinations in northeastern Ohio via all-rail routes. Incidentally, I might add that so far as the ex-river rates from origins on the W. & L. E. Railway are concerned, that line proposed to establish substantially lower than the existing rates. To Cleveland and Lorain they desired to put into effect a rate of $1.10 and to Canton and Massillon a rate of 95 cents. These were increased to the figures stated upon the exhibit by reason of the decision of the Commission in (2601) I. & S. Docket 3619.

Mr. Adell's Exhibits 203 to 214, inclusive, deal with the application of I. C. C. Docket 23922 scale and various per-

centages of the Holmes & Hallowell scale applied to dis-
[fol. 2404] tances from numerous origin fields to destinations in Northeastern Ohio, but inasmuch as I shall later comment at some length upon such mileage scales, it is unnecessary for me to address myself to these exhibits particularly.

I have noted the inconsistencies in the figures to which I testified in regard to the number of men employed in the coal mines in the state of Ohio for the years 1929, 1930 and 1931 and the figures appearing on Witness Reitell's Exhibit 221. Mr. Reitell, in his Exhibit 221 shows the number of men employed in coal mines in the state of Ohio during 1929 as 25,399, in 1930, 25,574, and 1931, 25,085. At page 169 of the transcript, I indicated that the aggregate number of employes in coal mines in Ohio during 1929 was 212,845, in 1930, 239,540, and in 1931, 236,663. Of course, Mr. Reitell's figures and mine do not treat the situation similarly, mine being representative of the aggregate number of employes and his being probably an average number of men employed per mine working day, but I am even on this basis unable to reconcile the figures. It would certainly appear that if the aggregate number of (2602) employes in 1931 exceeded 1929, then the daily average number of employes in 1931 would exceed 1929. I believe, however, both Mr. Reitell's figures and mine show that the unemployment within the state of Ohio resulting from the depression has not been contributed to by the coal mining
[fol. 2405] industry, which seems to have maintained the same or a greater number of employes throughout the depression as in the last year of good business, 1929.

In connection with Mr. Ackerman's Exhibit 246, that Witness testified that the exhibit set forth distances from the No. 8 and Cambridge districts to the important destinations in northeastern Ohio via the shortest tariff routes, except that in the instance of Cambridge district distances to certain destinations he discarded the tariff routes because of circuity and constructed so-called reasonable short route distances. On page 1592 of the record he specifically stated that no tariff routes from the No. 8 district had been discarded as unduly circuitous but on checking the exhibit I find that the route from the W. & L. E. Railway No. 8 district to Rocky River via Valley Junction—B. & O. Railroad Cleveland and N. Y. C. & St. L. Railroad is not con-

tained in the tariff and is therefore a constructed route. The short tariff route from the W. & L. E. (2603) Railway No. 8 district to Rocky River is via W. & L. E. Railway-Cleveland-N. Y. C. & St. L. Railroad. In the instance of routes from the Cambridge district with but one or two exceptions he has discarded the tariff routing entirely and constructed routes to suit his purposes, and thereby has arrived at distances which do not reflect the actual number of miles which Cambridge district coal is transported to these destinations.

[fol. 2406] Concerning Page 3 of Exhibit 246, upon which the origins of mines used for the purposes of his distance calculations are shown, they being the same as I introduced as Exhibit 162 in the Lake Cargo Coal Rate Cases, Dockets 23240 and 23241, and in the Republic Steel Corporation Case, Ohio Docket 7252, as Exhibit 40, I desire to state that those active mines covered the period February 1, 1929 to March 31, 1930 and do not therefore take into account the changes which have occurred in the number of producing coal mines since that time. The list of mines used by Mr. Ackerman is not therefore as up-to-date as those upon which my distance calculations were based.

Exhibits 248 and 249 show Mr. Ackerman's constructed or suggested routes which, as I have previously stated, are not at all representative of the mileage coal from the Cambridge district is actually transported to the destinations where such is used. As a matter of fact, the (2604) use of such routes is not consistent or in conformity with the decision of the Interstate Commerce Commisison in Docket 23922 which prescribed the scale which Mr. Ackerman employs in his attempt to justify the existing Ohio intrastate rates. The excerpt from this decision as quoted in Mr. Ackerman's Exhibit 247 clearly shows that the distances used in applying the scale were to have been computed on the averages of the distances over the shortest existing tariff routes, and the addition to this of the phrase [fol. 2407] "not unduly circuitous" was made by the Ohio Commission in Docket 7252, which was necessary in order to arrive at the rates to Canton and Massillon therein prescribed.

In Exhibits 269 and 305 Mr. Ackerman has computed distances apparently from mines listed in circulars published by the carriers or from other information he has obtained.

Just why he did not use the lists of active mines contained in my Exhibit 162 in the Lake Cargo Coal Cases, Dockets 23240 and 23241, even though such are now obsolete, I have been unable to discover. Except in a few instances which I shall detail, his mileages are not greatly (2605) dissimilar from those I introduced, but they are confined to short tariff routes, whereas my distances include all tariff routes, thereby presenting a more complete picture. In the instance of distances from mines in the Fairmont district to Canton, Ohio, Mr. Ackerman shows 238.6 miles. On my Exhibits 38 and 42 the distances from all tariff origin points is 210.8 miles, and on Exhibits 40 and 45 from active mines 193.9 miles. This variation is presumably due to the fact that Mr. Ackerman failed to utilize the route of the B. & O. Railroad through Dover and Valley Junction and computed his distances via Warwick and Akron Junction. I have also noted several instances where the short route stated by Mr. Ackerman is not in fact the shortest tariff route, but inasmuch as the respondent carriers contend that [fol. 2408] distances should be computed via all tariff routes, it does not appear necessary to make specific mention of these.

Taking these exhibits by and large, Mr. Ackerman has not treated the mileages from districts outside the state of Ohio in a manner fairly comparable with his treatment of the Ohio distances because he has in no instance constructed interstate routes in order to produce lower mileages than the short tariff routes.

(2606) It would seem that if the relative levels of rates within Ohio and interstate rates to destinations in Ohio are to be compared the mileages should be constructed upon a uniform theory. It goes without saying that the shortest tariff routes from origins outside the state of Ohio are not necessarily representative of the shortest possible routes.

Before leaving the question of mileages I would like to state that although several of the witnesses who have appeared in this case have criticised the mileages I have offered in evidence, the majority of such involve trivial matters which affect but slightly, if at all, the average distances via individual or combinations of routes. Where the exceptions to my distances were well founded and material, I have made corrections to my exhibits and have introduced them at this hearing. For the purpose of show-

ing that my figures, although they have been more or less severely criticised, are not greatly dissimilar than those [fol. 2409] introduced by the critics themselves, I desire to offer as Exhibit 393 statements showing distances taken from my Exhibits 33 and 36, Mr. Adell's Exhibits 175, 176, 178, 179, 181, 185, 188, 189 and 191, and Mr. Ackerman's Exhibit 246 from the Ohio No. 8, Middle and Massillon (2607) districts to Cleveland, Lorain, Huron, Canton and Massillon, Ohio, via the shortest tariff routes.

(Exhibit 393, Witnesse Kern, received in evidence.)

This exhibit is offered only for the purpose of showing the slight variations in the distances and does not carry with it any admission on my part that distances via shortest tariff routes are proper for use in determination of the issues in these cases.

(In response to questions by Mr. Martin:)

(2608 In the first line of my heading, Exhibit 393, I show average distances from mines (2609) and shipping or tariff origins in the Ohio No. 8, Middle and Massillon districts. As to whether I have used tariff origins in each case in the three columns where I have compared the results of my exhibits and of Mr. Adell's exhibits and Mr. Ackerman's, I would say I have used exactly what they put in in the exhibits that I referred to there, and that was the nearest comparison that I could make in this record. Mr. Ackerman's computations, as I understand them, were from my active mine list as prepared from the Lake Cargo [fol. 2410] coal, what we call the active mine list in the Republic Steel Corporation Case, Exhibit 40. I don't recall offhand whether the exhibits of Mr. Adell I selected, were tariff origin exhibits. If you refer to his exhibits you will find what I mean. I think on this page they are all active mines. For example, they must be the same, because you will notice your Wheeling & Lake Erie distances are identical, 122.8 miles, Mr. Adell'e showed, and 122.8 miles I showed.

I don't believe my column on the first page is all tariff origins (2610), but I will check it. Yes, that is correct—all tariff origins.

(In response to questions by Mr. Orcutt:)

The question of adjusting rates on coal from the various districts comprising the Ohio districts and the Crescents on the basis of a mileage scale has been advocated for many years by certain shipping interests, particularly those serving the coal districts situated nearest to the important markets of C. F. A. Territory, but the carriers have always refused to adjust their rates in that way because they have felt that rates on coal cannot be successfully maintained on a strictly mileage basis. Mileage in the construction of coal rates is but one factor and one which is frequently disregarded to a very great extent. This is necessarily the result not only of grouping points of origin and destination, but also the result of origin and destination differen-
[fol. 2411] tials which were originally made to reflect competitive conditions and have been consistently maintained with that end in view. For the carriers to now depart from these principles of rate making and go to a mileage basis would entirely disorganize (2611) the rate relationships under which coal has been marketed in the important and highly competitive industrial centers of northeastern Ohio and would also radically disturb the destination relationships and cause, in my judgment, prejudice and preference as between destinations.

Because of the more or less uniform use of 85 per cent of the Holmes & Hallowell Scale in the 23922 original scale for distances up to 100 miles and because numerous witnesses in these proceedings have emphasized this relationship, as well as the percentage which the rates in the scale above 100 miles bear to rates for corresponding distances in the Holmes & Hallowell scale, I desire to point out some of the reasons why the carriers for which I speak have consistently opposed all efforts that have been made to measure rates within Central Freight Association Territory through the use of the Holmes & Hallowell scale or percentages of it. The Holmes & Hallowell scale was prescribed for application on ex-lake coal reshipped from storage docks at the upper lake ports to interior destinations in Minnesota, North Dakota, South Dakota and Wisconsin, and for reasons which I shall enumerate reflects a low and depressed level of rates.

[fol. 2412] First, the rates being for application to but part of a through movement, are in the nature of proportional rates; second, the low level of Minnesota intrastate

rates in (2612) effect prior to the prescription of the Holmes & Hallowell scale necessarily reacted to depress that scale; third, the low level of the competitive bituminous coal rates from origins in Illinois and Indiana, as well as from origin districts west thereof, rendered it injudicious to make the scale on a level higher than would permit the ex-lake coals to freely compete with the coals from Illinois, Indiana and other origin districts; fourth, the reasonableness of the rates on ex-lake coal was a matter of secondary consideration in the Holmes & Hallowell cases, the important issues being prejudice and preference; fifth, operating conditions on the lines from the head of the lakes to the destination territory within which the Holmes & Hallowell scale applies are characterized as ideal; and sixth, the Holmes & Hallowell scale as finally prescribed was reasonably satisfactory to the defendants over whose rails the rates apply.

My first reason involves the character of the movement. No coal is produced within the states of Wisconsin and Minnesota, and consequently any rates from lake ports in those states are necessarily proportional in the sense that they apply on traffic which has been transported at lake cargo coal rates to lower Lake Erie ports and has been moved [fol. 2413] thence by bulk freighters to the storage docks (2613) at the head of the lakes. Of course, the Holmes & Hallowell scale was made without regard to services of assembling coal within the coal fields such as must necessarily be considered in the instance of rates here under consideration.

The second reason for the low level of the Holmes & Hallowell scale is substantiated by the decisions of the Commission in the first report in Holmes & Hallowell Company versus G. N. Railway, 37 I. C. C. 627. The following sentence appears at Page 629: "These cases are an outgrowth of rate legislation by the state of Minnesota." In discussing the facts leading up to the filing of the complaint, the Commission relates how in 1907 the state of Minnesota prescribed maximum commodity rates, how the application of the state-made rates, under the restriction of federal injunctions, was deferred for seven years, and how following the decision of the Supreme Court in the Minnesota Rate Cases, 230 U. S. 352, the intrastate commodity rates, which were lower than the commodity rates between the same Minnesota points via interstate routes, became effective,

and substantial reductions were made in the interstate rates. Again, in the first report in the Holmes & Hallowell case, the Commission found that the interstate actual rates attacked had not been shown to be unreasonable, but that unjust discrimination was caused by the relation of the coal [fol. 2414] rates in that territory. The (2614) complaints were dismissed as to commodities other than coal and were held for further hearing only as to the rates on coal. In the fourth report of the Commission on re-argument, 77 I. C. C. 683, the question of relative rate levels state versus interstate was again discussed and the Commission said:

"It is a corollary that had we been concerned with the interstate rates alone, we might have found justification for a higher basis within that zone embraced within the flexible limits of judgment respecting reasonable rates."

That the Minnesota intrastate rates have continued to exercise a depressing influence on the interstate rates from the head of the lakes to interior territory is shown by the fact that even after the Holmes & Hallowell rates became effective some carriers operating entirely in Minnesota and which were not subject to the Interstate Commission's orders in the Holmes & Hallowell cases continued to carry intrastate rates which were lower than that scale and the lines subject to the order in the Holmes & Hallowell cases were given Fourth Section relief to meet the low intrastate rates at competitive points in "Rates on Coal and Cement from Duluth and Superior", 91 I. C. C. 627.

The third reason I assign as influencing the low level of rates under the Holmes and Hallowell scale is the low [fol. 2415] level of rates from Illinois mines to northwestern territory (2615). From the location of the origin fields in Illinois and Indiana, as shown upon my map, Exhibit 21, the necessity for a relationship between the ex-lake rates from the head of the lakes and the all-rail rates from Illinois and Indiana mines to destinations in the northwest, where such coals are intensively competitive, is fundamental. That such relationships have existed for many years is indicated in the Commission's report in Illinois Coal Traffic Bureau versus Director General, 58 I. C. C. 351, where at Pages 352 and 353 the Commission said:

"The foundation upon which complainants predicate their case is that a recognized and satisfactory relation-

ship in the rates from Illinois-Indiana and from the docks obtained from as far back as 1887 until December 1, 1910, whereunder extensive investments were made in coal properties in both states and complainants' members were able to sell successfully in the indicated destination territories, collectively termed of record the northwest, and affording the only outlet unhampered by strong competition."

That complaint was dismissed and the summary on Page 359 of 58 I. C. C. indicates that the relationship between the rates from the upper lakes ports and the Illinois mines was created with reference to commercial or competitive conditions and that relative transportation services were (2616) secondary considerations.

[fol. 2416] The relationship between the rates from the upper lake docks and the rates from Illinois mines was again before the Commission in a different form in the Lake Dock Coal Cases, 89 I. C. C. 170, in which the complainants assailed the rates and rate relationships on coal in carloads from Lake Superior and Lake Michigan docks and mines in Illinois, Indiana, Kentucky, Arkansas, Wyoming, and Montana to destinations in Minnesota, Iowa, North Dakota, South Dakota and Wisconsin. The competition of coal in this destination territory was described generally as follows:

In Minnesota, between Lake Superior dock and southern Illinois coals; in North Dakota between dock coal, North Dakota lignite and Montana and Wyoming coals; and in South Dakota between dock coal, southern Illinois, Montana and Wyoming coals and Dakota lignite.

The Commission found that the adjustment of rates under attack in the Lake Dock Coal Cases, from the Lake Superior docks on the one hand and from southern Illinois mines on the other, to certain destinations in Minnesota as described in the report, was unduly prejudicial to complaining lake dock shippers and preferential of producers of the southern Illinois coal, and the Commission prescribed increased rates from the southern Illinois mines to remove that preference and prejudice (2617).

Even after the southern Illinois rates were increased as a result of the Commission's decision in the Lake Dock [fol. 2417] Cases, there have been numerous claims made by those interested in the sale of coal handled through the upper lake docks that their coals were at a competitive

disadvantage at the Twin Cities. These claims are predicated on a comparison of the rate from southern Illinois of $3.65 and the constructed total transportation and handling charges on southern West Virginia high volatile coal of $4.49 made up as follows:

Rail to Lake Erie ports	$1.81
Transfer from cars to vessels	.08
Lake transportation	.40
Handling at upper lake docks	.25
Rail rate under the Holmes & Hallowell scale to the Twin Cities	1.75

This computation does not take into account such items as marine insurance and the degradation of the coal due to the several transfers. For more complete information as to the items entering into the cost of moving coal from eastern origins to the northwest via rail-lake-and-rail, I refer to the Commission's report in Lake Cargo Coal Cases 1917, 46 I. C. C. 159, at Page 185.

In connection with my fourth reason for claiming the Holmes & Hallowell scale to be low, what I have said with (2618) respect to the influence of Minnesota intrastate rates upon the level of the scale will serve to indicate that the chief issue in the Holmes & Hallowell cases was prefer- [fol. 2418] ence and prejudice rather than the reasonableness of the rates, which fact was confirmed by the Commission in its report in the Lake Dock Coal Cases I have referred to, in which the Commission at Page 176 said with respect to the Holmes & Hallowell case:

"The only other increase since 1910 was under our decision in the Holmes & Hallowell case. We there found that the then existing rates were unduly prejudicial and preferential to the extent that the interstate rates assailed from the docks to points in Minnesota, North Dakota and South Dakota exceeded for like distances or were relatively higher, distances considered, than the intrastate rates from Duluth to points in Minnesota. The distance scale was prescribed primarily for the purpose of removing such undue prejudice and preference."

My fifth assigned reason relates to transportation conditions and in connection therewith I quote from Page 698

of the original report in the Holmes & Hallowell Case, 60 I. C. C.:

"Transportation conditions from the head of the lakes to the twin cities are said to be ideal, and no material evidence was introduced tending to show that there were (2619) any unusual or difficult conditions encountered in connection with any of the transportation here involved."

Others in this case have dealt with transportation conditions as they obtain in the territory from the western Pennsylvania and Ohio districts to northeastern Ohio, and [fol. 2419] I refer to such for comparison with the stated finding of the Commission with regard to transportation conditions from the head of the lakes.

My sixth and last reason for believing the Holmes & Hallowell scale to be low has to do with the apparent satisfaction of the defendants in those cases with the scale as first prescribed in 60 I. C. C. 687. In the report of the Commission on further argument, 69 I. C. C. 11, the Commission discussed the objections of defendants to its findings in 60 I. C. C. 687. It was stated that the defendants' principal criticism was of the method that the Commission had prescribed for arriving at the distances to be used in determining the rates to the respective points at issue. At the bottom of Page 12 and the top of Page 13, the Commission said:

"Defendants apparently would be satisfied with the present scale provided the distances which the shipments actually move fixed or determined the rates and in no case where there is a reasonably direct single line would they have the rates fixed by a possibly shorter multiple line route."

(2620) It seems obvious that none of the parties to the Holmes & Hallowell cases would be interested in increasing the level of the rates prescribed if the defendant railroads did not show interest in that feature.

Aside from my views on the level of the Holmes & Hal- [fol. 2420] lowell scale, I believe it to be particularly unsuitable for use as a base or key in the construction of rates or mileage scale of rates in C. F. A. Territory because it, like all mileage scales, was created to fit a situation peculiar to the territory within which it was made to apply. The scale is decidedly unbalanced in that it is relatively lower

in the shorter distance blocks than in the higher, and it is a matter of common knowledge that this lack of balance is directly attributable to the fact that the scale was constructed with the idea of making rates to the Twin Cities and territory intermediate thereto, where competition of dock coals with all-rail coals from Illinois-Indiana was more pronounced, sufficiently low to permit or promote the movement of the dock coals, whereas to territory west of the Twin Cities where the need of a lower level of rates was not so pronounced the scale tended toward a higher level of rates. Such a scale is hardly one to be used as a universal key in the making of coal rates.

(2621) Various parties to these proceedings have cited numerous decisions where the Commission has used the Holmes & Hallowell scale in the determination of rates, but the fact that those cases invariably involved rates between points west of the Ohio-Indiana state line is significant. The Commission has never to my knowledge made rates from origins in Ohio or the Crescents on a basis related to the [fol. 2421] Holmes & Hallowell scale, but as in Indiana State Chamber of Commerce versus B. & O. Railroad, et al., 83 I. C. C. 591, at Page 598, have on several occasions seen fit to condemn or disregard efforts of complainants to secure reductions through the means of relating rates to the Holmes & Hallowell scale. So, too, the decisions of the Commission affecting rates from the Ohio districts and the Crescents to Central Freight Association Territory are replete with findings that such were affected so greatly by competitive influences that the element of mileage has been to a large degree disregarded and the rates made upon group principles, which is the antithesis of mileage rates.

I have analyzed Witness Adell's Exhibit 202 and Witness Ackerman's Exhibits 306 and 307 which extend the scale prescribed by the Interstate Commerce Commission in Docket 23922 to include distances beyond 300 miles and endeavored to adapt the entire scale so extended to a formula which progresses the rates in relation to the (2622) square roots of the distances. Attempts to so make mileage rates are frequently encountered by the carriers in rate cases and are subject to the general criticism that they convert the art of rate making into the science of mathematics. Rate making is and always has been an art as distinguished

from a science, and consequently all mileage scales which have stood the test of time and usage have been constructed [fol. 2422] to meet a given situation rather than with regard to exact and arbitrary rules of mathematics. Mileage scales are reduced or inflated, the distance blocks spread or contracted, to meet given conditions or to reach a predetermined objective, which is usually described as a base rate. Illustrative of this is the Twin Cities rate in the Holmes & Hallowell scale. The fundamental weakness of arbitrary scales mathematically constructed without regard to conditions is, I believe, best illustrated by the action of this Commission in the Eastern Class Rate Case, Docket 15879, where, after having created a mileage scale of class rates, they proceeded to fix key rates between all the important shipping and consuming points in Official Classification Territory, which were intended to overcome the artificiality of strict mileage rates. These key rates gave expression to the Commission's ideas as to what relationships should be accorded between the important (2623) communities or groups of communities in the class rate structure. Needless to say, the key rates so prescribed are much at variance with the mileage scales.

At Page 1370 of this record Mr. Adell quoted from the Western Cement Cases, 48 I. C. C. 201, at Page 211, and included the following sentence: "It was found that if the progression on the basis of making rates proportional to the square root of the distance was extended for very long distances the ton mile earnings become clearly too low." [fol. 2423] This sentence states the fact very mildly. Mr. Ackerman's Exhibit 306, which progresses the 23922 scale as amended by him up to 600 miles, shows that at 600 miles the progression is at the rate of 2.4 mills per ton mile, which is clearly less than reasonable earnings. Mr. Adell's Exhibit 202 shows similar ton mile earnings for the block terminating at 600 miles. By extending his scale to 1,000 miles the earnings per ton per mile in the last block is reduced to 2 mills. At 2,000 miles it becomes 1.4 mills; at 3,000 miles, 1.1 mills, and at 5,000 miles but .9 mills. Clearly any formula which does not presuppose an irreducible minimum in the ton mile earnings for the individual mileage blocks is unsound.

Another inherent defect in this formula for constructing mileage scales is the fact that too much is dependent upon the starting point, which is to say the distance (2624) which

is selected as a base upon which to predicate the computation of the rates of progression. Upon this point I have prepared many figures. If we start with the 23922 scale for 10 miles and progress it on the square root formula using the same mileage blocks as the 23922 scale we arrive at a rate of $3.29, which is $1.19 higher than the scale for the block 275 to 300 miles. For the block 140 to 160 miles, in which falls the average all-route distance from the No. 8 district to Cleveland we get a rate of $2.40, which is 85 cents higher than the [fol. 2424] scale. Of course, as our base distance increases the scale necessarily is reduced, and consequently calculations of scales using as the base mileages in excess of 70 miles as used by Mr. Ackerman, or 100 miles as used by Mr. Adell, would result in lower rates than either of them have produced.

So much for the upward progression of the scale. Of course, it is possible to create rates for distances below that arbitrarily selected as the base. In the Docket 23922 scale the rate for less than 10 miles is 60 cents. If we were to take Mr. Ackerman's base of 70 miles and work backwardly to arrive at a rate for 10 miles, we would get 38 cents, working backwardly from Mr. Adell's 100 mile base we would get 39 cents. Such rates are obviously too (2625) low and Mr. Ackerman in his Exhibit 332 practically admits such by using terminal factors of 30 and 60 cents per ton. I believe that these citations show that this mathematical formula can be carried to utterly ridiculous extremes and does not lend itself to the use of any sound discretion.

Even a superficial analysis of Mr. Ackerman's Exhibit 307 is sufficient to show the extremes to which one must go to reconcile any given scale with this formula and the fact that the best you can do is merely to create a scale which approximates that given you. On Page 2 of the exhibit he [fol. 2425] shows a scale prescribed in 98 I. C. C. 183 and is forced to use 10 miles as the base distance in order to fit the rates of progression used by the Commission. If he had done the same in constructing his coal scale the level, as I have previously pointed out, would be alarmingly high and produce a rate from the No. 8 district to Cleveland of $2.40, which is 95 cents higher than the present intrastate rate under attack, and 66 cents higher than the present interstate rate. On page 4 of the exhibit reference is made to the scale prescribed by the Commission in 98 I. C. C. 361.

Here the progression starts at 50 miles, which is presumably necessary in order to reconcile it as nearly as possible to the square root formula. Page 5 contains a scale prescribed in 104 I. C. C. 717 (2626) and the base mileage is 100 miles. Had Mr. Ackerman seen fit to use his formula to construct rates for distances under 100 miles he would have reduced the Commission-prescribed scale by 7 cents for the block 20 to 40 miles, 3 cents for the block 40 to 60 miles, and 1 cent for the block 60 to 80 miles. On page 6 of the scale cited was prescribed in 112 I. C. C. 7 and the base mileage used for the square root computation is 120 miles. Again, if from this point that formula had been employed to make rates for the lower blocks, the prescribed scale would have been reduced from ½ to 2 cents per 100 pounds. The scale shown on Page 7 of the exhibit, prescribed in 139 I. C. C. 88, [fol. 2426] is subject to approximate reconciliation with the square root formula only by using 100 miles as the base. Here had Mr. Ackerman used the formula to construct rates for lesser distances he would have reduced the prescribed scale for the several blocks from 2 to 15 cents per ton. Page 8 sets forth scale prescribed in 139 I. C. C. 339 and the base mileage used by Mr. Ackerman for his purposes is 100 miles. On page 9 the scale shown is subject to check on the square root theory only by using the square root progression from 10 miles. The scale on Page 10 is adapted to a square root progression from 10 miles. The scale on Page 11 is adapted to a square root progression from 40 miles. On Page 12 from 80 miles, and on Page 13 from 70 (2627) miles. It is obviously unsound to adopt a formula for the construction of a mileage scale which depends so much upon the determination of a proper rate and distance at which to start calculations.

Of course, all of the improprieties of the square root formula which I have pointed out arise from the fallacy of trying to make a rate and/or an alignment of rates without regard to anything but mathematical considerations. The considerations which enter into rate making are entirely practical and after all if the carriers are to maintain a profitable level of rates which permit of free competition as between both shipping interests and consumers, as they have in the past, we must continue to make rates with re- [fol. 2427] gard to those conditions rather than on artificial and arbitrary mileage basis.

[fol. 2428] *Testimony Taken at Columbus, Ohio, February 13, 1933.*

(2628) Mr. Ballard: Mr. Examiner, with your permission, I would like to have the record show that I now serve the parties with copies of the memorandum in support of the motion certified to the Commission and which memorandum is due today and has been filed with the Commission in Washington.

Exam. Trezise: Let the record show that this momorandum in support of the motion for postponement of the hearing certified to the Commission by Examiner Trezise, February 7, 1933, is received.

[fol. 2429] (2629) Direct examination of Roy S. Kern (continued).

By Mr. Orcutt:

Prior to adjournment I finished the discussion of the square root theory of progressing mileage scales.

I have some comment to make in connection with Witness Eldridge's Exhibits 347 to 354, inclusive. These exhibits, which are various mileage computations, check out reasonably close to corresponding distances which I have introduced, but are subject to the same criticism as I made in connection with Mr. Ackerman's (2630) mileage exhibits in that in so far as Ohio Districts are concerned, the tariff routes in instances are discarded, whereas from origins in districts outside of the state of Ohio, tariff routes are used in all cases.

With respect to Exhibit No. 351, on which Mr. Eldridge shows the detail of his calculations from mining points in the No. 8 district on the P. R. R. to Canton and Massillon, Ohio, I desire to call attention to the instances where he has departed from tariff routes and constructed routes, thereby materially reducing the distances. This produces a very peculiar situation in as much as numerous of the distances via the tariff routes which he has discarded are shorter than distances from origin points in connection with which he has not constructed routes but has used [fol. 2430] the shortest tariff routes as representative of reasonable distances. To explain this, I desire to cite the distance of 111 miles from Marcoll Mine to Canton applicable via the P. R. R. direct. This figure is used in

both his short tariff route and reasonable direct route computations. On the other hand, from origins such as Copeton Mine, Wayne Coal Mine, Narva Mine, etc., where the distances range from 89 to 96 miles via the shortest tariff routes, he has seen fit to discard such mileages and substitute shorter. It seems to me that if a distance from a mine in the No. 8 district to Canton of as much as 111 miles is declared (2631) or admitted to be reasonable for rate making purposes, then there appears no justification for discarding as unreasonable mileages for lesser distances.

In the case of Massillon, the maximum reasonable distance Mr. Eldridge shows as obtaining from Marcoll Mine to Massillon via P. R. R. of 119 miles, whereas he has discarded as unreasonable distances ranging from 97 to 103 miles.

In Exhibit No. 353, showing distances from mining points on the P. R. R. in the Middle district to Canton and Massillon, via shortest existing tariff routes and reasonable direct routes, Mr. Eldridge has used a distance from Tyrone Mine to Canton of 73.9 miles and to Massillon of 65.9 miles as reasonable, yet in instances where he has seen fit to construct routes he has cut the short [fol. 2431] tariff route distances from a maximum of 93 miles and a minimum of 79.1 miles in the instance of Canton, and a maximum of 101 miles and a minimum of 87.1 miles in the instance of Massillon, to a maximum of 62.4 miles and to a minimum of 38 miles to Canton, and a maximum of 55.4 miles to a minimum of 35.5 miles to Massillon. In view of the fact that the shortest (2632) tariff route distances represent the minimum transportation services in miles performed by the carriers, it appeals to me that the use of distances via constructed routes which are less than the maximum distances from other mines in the same origin group via admittedly reasonable routes is unfair, and does not result in average distances that are in any sense representative of the mileage the carriers actually handle the traffic, or the mileage the carriers hold themselves out to perform for the published rates.

The inconsistencies of Mr. Eldridge's selection of routes are also to be noted in the decision of the Public Utilities Commission of Ohio in Docket 7252, which prescribed the rates to Canton and Massillon involved in these proceedings. Mr. Eldridge has also failed to give consideration

to the fact that until the decision of the Ohio Commission the Cambridge district was accorded the same rates as the No. 8 district, which reflects a rate making principle unquestioned on this record. Had he joined the Cambridge district with the No. 8 district in his calculations, [fol. 2432] the average distances to Canton and Massillon would have been increased somewhat.

I do not know of any instance where coal in substantial quantities from the Appalachian fields moves on a mileage scale.

(2633) I have consulted with the United States Department of Commerce Bureau of Mines, Coal Division, concerning the average production of coal per mine in Ohio, as compared with average production per mine in Illinois and Indiana for the year 1931. According to the records of the United States Department of Commerce Bureau of Mines, Coal Division, in 1931, there were a total of 504 producing coal mines in the state of Ohio. The total production in Ohio that year, 1931, was 20,410,995 tons, or an average or 40,498 tons per mine. Of the total mines there were 6, or 1.2 per cent classified A-1, which is to say mines that produced over 500,000 tons. These 6 mines produced 4,061,788 tons or 19.9 per cent of the state's production. Class 1-B mines producing from 200,000 to 500,000 tons included 24 operations or 4.8 per cent of the total mines in the state of Ohio. These produced 7,858,233 tons or 38.5 per cent of the state's production. Class 2 mines, producing from 100,000 to 200,000 tons included 22 operations or 4.4 per cent of the total. These produced 3,163,704 tons or 15.5 per cent of the state's total. Class 3 mines, producing from 50,000 to 100,000 tons, included 36 opera- [fol. 2433] tions or 7.1 per cent of the total mines, and produced 2,694,251 (2634) tons, or 13.2 per cent of the state's produtcion. Class 4 mines, producing from 10,000 to 50,000 tons, included 78 operations, or 15.5 per cent of the total, and produced 1,796,168 tons, or 8.8 per cent of the state's total. Class 5 mines, producing less than 10,000 tons, included 338 operations, or 67 per cent of the total, and produced 836,851 tons, or 4.1 per cent of the total.

In Illinois during 1931, there were 536 mines producing 44,303,295 net tons, an average of 82,655 tons—more than twice the average production per mine in Ohio during the same year. The frequency distribution as to mines classified by size for the state of Illinois is as follows:

Class 1-A mines, producing over 500,000 tons, include 30 operations or 5.6 per cent of the total, and produced 22,727,590 tons or 51.3 per cent of the total.

Class 1-B mines, producing from 200,000 to 500,000 net tons, included 43 operations or 8 per cent of the total, and produced 13,999,841 tons or 31.6 per cent of the state's total.

Class 2 mines, producing from 100,000 to 200,000 tons, included 21 operations or 3.9 per cent of the total mines, and produced 2,924,017 tons or 6.6 per cent of the state's total (2635).

Class 3 mines, producing from 50,000 to 100,000 tons, included 30 operations or 5.6 per cent of the total, and produced 2,057,952 tons, or 4.6 per cent of the state's [fol. 2434] total.

Class 4 operations, producing from 10,000 to 50,000 net tons, included 68 mines or 12.7 per cent of the total, and produced 1,637,222 tons or 3.7 per cent of the state's production.

Class 5 mines, producing less than 10,000 tons, included 344 operations or 64.2 per cent of the total, and produced 974,673 tons or 2.2 per cent of the state's production.

In the state of Indiana, there were 168 operations reporting to the Bureau of Mines in 1931, a production of 14,295,165 tons or an average of 85,090 tons per mine, which is also more than twice the average production per mine in the state of Ohio. The Indiana production as classified according to the sizes of the mines was as follows:

Class 1-A mines, producing over 500,000 tons, included 4 operations of 2.4 percent of the total, and produced 2,444,473 tons or 17.1 per cent of the total.

Class 1-B mines, producing from 200,000 to 500,000 tons, included 19 mines or 11.3 per cent of the total, and produced 6,461,415 tons or 45.2 per cent of the total.

Class 2 mines, producing from 100,000 to 200,000 tons, included 23 operations or 13.7 per cent of the total and (2636) produced 3,345,069 tons or 23.4 per cent of the state's production.

Class 3 mines, producing from 50,000 to 100,000 tons, [fol. 2435] included 12 operations or 7.1 per cent of the total, and produced 914,890 tons or 6.4 per cent of the production.

Class 4 mines, producing from 10,000 to 50,000 tons, included 34 operations or 20.2 per cent of the state's total,

and produced 857,710 tons or 6 per cent of the state's total.

Class 5 mines, producing less than 10,000 tons, included 76 mines or 45.3 per cent of the total, and produced 271,608 tons or 1.9 per cent of the state's total.

Mr. Paisley's Exhibit No. 345 entitled, "Statement Showing Rates on Bituminous Coal Which, Measured by I. C. C. Docket 23922 Scale, Are as Low as or Lower than the P. & W. V. Reduced Rates from the Pittsburgh District,"—on this exhibit certain rates are prefixed by an asterisk, which is stated on the exhibit to mean rates which are not related to other rates by fixed differentials. I desire to call attention to what I believe are not instances where this asterisk should have been used. The instance of the Cambridge rate to Akron, Ohio, of $1.51. This rate is the same as that which obtained from the No. 8 district to Akron prior to the reductions of August 1 (2637) and subsequently. That, of course, was reduced the same measure as the No. 8 district rate was reduced under order of the Ohio Commission. Consequently, while of course there is no differential relation between the two rates, No. 8 and Cambridge, there is an absolute relationship there which has been maintained for many years.

[fol. 2436] Again, the Cambridge district rate of $1.26 to Columbus is made on the same basis as the Hocking district rate to Columbus, which is usually considered the base for that adjustment. The Ohio No. 8 district rate of $1.39 to Columbus applies only from mines on the B. & O. in the St. Clairsville and Wheeling Creek districts and from the P. R. R. Pan Handle origins. The rate from P. R. R. C. & P. origins is $1.76, and from the New York Central origins $1.83. These are the only rates which apply from the Ohio No. 8 district to Columbus and they are all generally considered to be controlled by the basic Hocking district to Columbus rate. The ex-river rate from Mingo Junction, Ohio, to Cleveland of $1.27 is well known to have been made differentially 50 cents over the 77 cent rate from Conway and Colona to Youngstown. This is also true of the ex-river rate from Mingo Junction to Lorain.

The Fairmont district rate to Mansfield, Ohio, is the same as the Pittsburgh district rate. The Fairmont district rate to Canton, Ohio, is differentially 25 cents over (2638)

Pittsburgh, that is, the rate obtaining from the P. R. R. Fairmont district. This differential has been maintained since April 24, 1920, and has previously been 15 cents over. The widening was the direct result of the decision of the Interstate Commerce Commission in I. C. C. Docket 8899, the Canton Chamber of Commerce Case previously cited by me.

The rate of $1.34 from the B. & O. Moundsville district, Benwood Junction and north to Youngstown is the Pitts- [fol. 2437] burgh district rate and is made competitive with the P. R. R. P. W. & K. rate to Youngstown. The Moundsville district on the B. & O. south to Benwood Junction, the rate of $1.42 is the Connellsville district rate. The B. & O. Fairmont district rate to Massillon, Ohio, is the Connellsville district rate. The rates appearing on the exhibit of $1.64 from the Monongah, Short Line, Clarksburg, Belington, Roaring Creek, Upshur, Myersdale, are the original Fairmont district rates.

That also applies from the P. R. R. Altoona district and the New York Central Clearfield district. This rate or its forerunner was maintained from the Fairmont district proper until March 1, 1922, when there was a downward revision made in the Fairmont proper rate which results in that being at the present time $1.58, or 6 cents lower than the original base rate.

(2639) I also desire to note that the distance of 259 miles used by Mr. Paisley as representative of the B. & O. Fairmont to Canton, Ohio, mileage and which was taken from my original Exhibit No. 38 has since been corrected, and the proper figure is now 214 miles.

It is correct that that reduction is caused by the route over via Valley Junction.

The tariff route is via B. & O. direct, but I understand the B. & O., through an arrangement with the Pennsylvania Railroad, use the Pennsylvania Lines between Dover and Valley Junction as their own, but it does not show in the tariff.

[fol. 2438] On Pages 1880 and 1881 of the Washington hearing Mr. Andrew H. Brown, of the Cleveland Chamber of Commerce, attempts to show that the present coal rates to Cleveland are wrong in their relationship with rates to Youngstown, particularly citing the history of the spreads in iron ore rates between those two points. Mr. Brown did

not state that the iron ore rates had not been advanced in the same degree as the coal rates, because the Director General of Railroads during Federal control saw fit to apply the General Order 28 advance to the rates obtaining (2640) from the ore mines in the northwest to the ports and to make no advances whatever in the ex-lake rates from the ports. Obviously, if the ex-lake rates had been advanced the measure of increase subsequently, as expressed in cents per ton, would have been much greater. In fact, they would have stayed very close to the increases in the coal rates.

At the time I introduced my Exhibit 368, responding to requests of counsel for additional tonnage information, I stated that I had in the course of preparation exhibits which would bring the information up to date, or through the year 1932. Accordingly I would like at this time to offer as an exhibit a statement of bituminous coal tonnage from Ohio and Crescent districts to Cleveland, Lorain, Canton, Massillon, Akron, Youngstown, New Castle and Mansfield by months for the two-months period November and December of the years 1929, 1930, 1931 and 1932.

[fol. 2439] (Exhibit No. 394, Witness Kern, received in evidence.)

During the hearing on last Friday, Mr. Burgess asked me to furnish certain tonnage information dealing with the movement of coal from the Freeport district of the Bessemer & Lake Erie to various points. He subsequently furnished me a pencil memorandum of the information he desired, and I have compiled the statistics from that. His request only asked for the year 1925 to 1929, inclusive, but in order to make the picture a little (2641) more complete, I have added 1930 and 1931, and offer that as Exhibit 395.

(Exhibit 395, Witness Kern, received in evidence.)

In the Property Owners' Committee Case, Docket 25657, Exhibit No. 125 of Mr. Kennedy was submitted showing tonnage from the complaining district, namely, Kanawha, Kenova, Thacker, Logan, New River, Winding Gulf, Pocahontas and Tug River destined to northeastern Ohio. Complainants in Docket 25590 introduced an exhibit showing rates and routes from other southern districts which are not complainants but from which the blanket rates of

$2.39 and $2.64 applied and some reference was made to the amount of tonnage moving from those districts to northeastern Ohio. In order that the Commission may have the entire picture an exhibit has been prepared supplementing Mr. Kennedy's Exhibit 125, showing the actual movement from all of the southern districts not included in that exhibit to the same Ohio destinations for the years 1929, 1930, 1931 and 1932. The figures are all taken from [fol. 2440] the reports of the Ohio Bureau of Coal Statistics. I desire to offer such an exhibit as No. 396.

(Exhibit 396, Witness Kern, received in evidence.)

(2642) Exhibit 395 covers the period 1925 to 1931 inclusive. The other two years are extra.

I wish to offer now as Exhibit 397 a statement of coal tonnage originated in 1931 on lines of various railroads in the states of Illinois and Indiana. Although the exhibit does not state it, the source of these figures is the reports of the Illinois Coal Traffic Association, conducted by C. W. Galligan.

(Exhibit No. 397, Witness Kern, received in evidence.)

(In response to questions by Mr. Day:)

I have made a check of the weekly carloadings of various railroads operating in and into Ohio from the reports of the American Railway Association. I have computed those figures based on the loadings for the year January 1 to August 1, 1932, and subsequent to August 1; to the last of January 1933. For the periods indicated the following numbers of cars of bituminous coal were loaded:

(2643)

Railroad	January 2 to July 30, 1932	January 2 to July 30, 1931
[fol. 2441] Wheeling & Lake Erie Ry.	22,562	34,497
Pittsburgh & West Va.	25,817	32,772
Baltimore & Ohio	249,774	355,426
Monongahela Ry.	107,355	147,447
Montour Railroad	41,496	61,045
New York Central R. R. (Ohio Central Lines Only)	24,535	45,181
Pennsylvania Railroad	362,633	468,773
Pittsburgh & Lake Erie	36,110	47,220

For the period August 1, to December 31, 1932 and 1931, the loadings were:

Railroad	1932	1931
Wheeling & Lake Erie	28,949	22,903
Pittsburgh & West Va.	25,237	23,657
Baltimore & Ohio	193,258	243,891
Monongahela Ry.	74,711	90,588
Montour Railroad	36,538	44,166
New York Central (O. C. L.)	30,362	33,911
Pennsylvania R. R.	274,370	322,275
Pittsburgh & Lake Erie	36,692	35,505

[fol. 2442] For the period from January 1 to January 28, 1933 and (2644) 1932, the loadings were:

Railroad	1933	1932
Wheeling & Lake Erie	5,276	3,807
Pittsburgh & West Va.	3,172	3,254
Baltimore & Ohio	34,097	38,487
Monongahela Ry.	11,205	14,635
Montour Railroad	5,498	6,354
New York Central (O. C. L.)	5,658	5,991
Pennsylvania R. R.	50,385	55,341
Pittsburgh & Lake Erie	3,801	4,427

These figures are made for account of the railroads serving the Pittsburgh, Connellsville, Fairmont and Ohio districts generally as nearly as we can finally get them from the general system figures given of these roads.

There is no separation of the Pennsylvania and B. & O. figures, such as there is for the New York Central. The figures I have read into the record are taken from the weekly loading statements of the American Railway Association—(2645) those are the summaries of those reports for the periods I have indicated, and cover the carloadings of bituminous coal on the lines named.

[fol. 2443] Cross-examination.

By Mr. Herrold:

(2645) Q. Why were the figures shown for the New York Central Lines only for the Ohio Central Lines?

Mr. Day: I think I might answer that, Mr. Herrold:

Because of the fact that the only coal produced in Ohio by the New York Central would be that in the No. 8 District, and as the figures previously given show, that tonnage is inconsiderable. We do have a separation of the New York Central (Ohio Central Lines) which do produce a fairly large volume of coal in Ohio, so we thought that that would be more representative of the situation in this territory. If we had been able to make a similar separation for the Pennsylvania and the B. & O. figures by territories we would have done so.

By Mr. Martin:

If I referred to Mr. Adell's exhibits 164 to 173 as showing the shortest possible routes, it is not precisely correct. (2646) It is not correct at all to say that those exhibits were constructed upon the basis of shortest possible routes, and if they do reflect the shortest possible routes I understand it would be accidental.

Referring to my statement with reference to his Exhibits 173 to 187 where he showed a route from Wheeling & Lake Erie mines to Massillon, Ohio, via the Wheeling-Canton-B. & O. and that no such rates exist via this route, I made no calculations to show whether the elimination of the route would make any difference in the mileage. I made no calcu-
[fol. 2444] lation to determine whether the elimination of the route which I referred to in connection with page 3 of his exhibit 188 as a route without tariff authority would make any difference in the mileage. Not having calculated it, I don't know if the criticisms which I have made of these exhibits were carried through there would be no change in the mileage, but the only point I wanted to make was to clear up that fact, that the routes were stated as tariff routes, where, as a matter of fact, they are not.

(2647) With reference to the progression of the 23922 scale, I made a figure for 5,000 miles. I do not know any point in the continental United States that is 5,000 miles from Cleveland or 4,000; 3,000 miles you are getting pretty close to what might be—I don't know. If you'll confine yourself to points in northeastern Ohio, we are confined here to distances of not in excess of 600 miles from points of origin in the Appalachian coal fields.

(2648) If I were given the duty of progressing the 23922 scale originally prescribed beyond 300 miles I would stay

away from any kind of mileage scale, whether to progress it or anything else. I can't see how you can make rates on a slide rule and get by.

Q. I understand your theory, Mr. Kern, but if upon the hypothesis that you have been required, as chairman of the Coal Coke and Iron Ore Committee to progress that scale under instructions of the members of the committee, how [fol. 2445] would you progress it in view of the criticisms you have made of Mr. Adell's method?

(2649) Mr. Orcutt: I object, Mr. Examiner. Mr. Kern has not been given that duty and he has not given the matter any consideration. In the second place, as he has said, he can't conceive of a mileage scale being applicable to this coal traffic in this particular territory, and in the third place we have never made rates in this particular district by taking mileage rates from others and extending them, and so I don't see how the witness can answer the question.

Exam. Trezise: The witness may answer the question if he has an answer.

The Witness: I am frank to say, Mr. Martin, that I would not know how about progressing that scale so as to arrive at an alignment of rates beyond 300 miles which would be consistent with the alignment under 300 miles. I don't think freight rates of any description, lend themselves to such accurate computations that one could say that if you have a perfect alignment of rates up to 300 miles, from that you can evolve and perfect an alignment beyond 300 miles. The commission could not do it in class rates, apparently, or in any other kind of rates.

By Mr. Martin:

Q. Is that as much as to say that it is impossible to make progressions of given scales, Mr. Kern, does it come to that? [fol. 2446] A. Generally, yes, because when a person is making a mileage (2650) scale he has a particular object in view and that object seldom, if ever, is perfect balance within the scale itself.

(Narrative continued:)

Referring to my reference to Docket 15879 as authority for the fact that in that case the commission prescribed key rates, the basis of figuring mileage in that docket, under

the commission's decision, was the shortest possible routes via junctions through which carload freight could be interchanged without transfer of lading. As the scale was actually applied, however, it was on the so-called key point basis, which was a computation of distances between all junction points. That was predicated upon the shortest possible routes basis.

The only mileage scale I know anything about from the Appalachian coal fields is one that was prescribed by the Ohio Commission a long time ago for short haul rates within the Hocking (2651) district up to 30 miles, and that handles tonnages which are very inconsequential.

Referring to Exhibit 396, showing tonnages from the L. & N. and other districts, my previous exhibits did now show any mileages from those districts to those destinations.

By Mr. Ballard:

I think it is correct that the carload figures by periods [fol. 2447] represent as good a separation as I can make of the loadings in the Pittsburgh, Connellsville and No. 8 Districts. All of the Cambridge production is included in the exhibit, being all on the B. & O. and Pennsylvania, which rates are included. It includes the Middle and Massillon, on the New York Central, Hocking and Pomeroy, Crooksville on the Pennsylvania. There is no New York Central except the Ohio Central lines, and the Ohio Central of the New York Central serves their Crooksville, Hocking and Pomeroy districts, but they do not serve Middle and Massillon or No. 8.

(2652) I didn't say that the New York Central tonnage in the Middle and Massillon districts was included, and as to there being some difficulty in getting the New York Central tonnage it is not a question of difficulty, it is a question of taking from these reports what will fit your purpose better. The purpose was to show loading of coal on those railroads or within those districts.

[fol. 2448] Mr. Day: Mr. Examiner, I would like to make a statement in that connection. The reason the New York Central figures other than the Ohio Central Lines were not shown was at my direction, and it was because the New York Central serves largely the coal fields in the east not affected by this adjustment into Central territory. We

have the figures for the New York Central and will be glad to supply them. It will take some time to compute them, but we can do it so as to have the figures here tomorrow if it will be helpful. It occurred to me, however, that on account of the fact (2653) that the Ohio tonnage of the New York Central would not be large the New York Central figures as a whole would not be representative, and having the Ohio Central figures separated for the New York Central I thought that would reflect the situation better.

Exam. Trezise: I think Mr. Ballard understands that now. You may proceed.

Mr. Ballard: I am not at all sure that I do. When you say it serves many mines in the east you mean the Clearfield district?

Mr. Day: Yes.

Mr. Ballard: Are the Pennsylvania Railroad's Altoona figures in here?

Mr. Day: The Pennsylvania System as a whole—there is no separation of the P. R. R.

Mr. Ballard: So that in the case of the P. R. R. all the figures representing the entire system are here?

Mr. Day: That is correct.

Mr. Ballard: That is not true of the B. & O.

Mr. Day: The B. & O.'s system figures are there, including the B. R. & P.

[fol. 2449] (Narrative continued:)

It is not an accurate statement to say these figures showed the cars of bituminous coal loaded in the Pittsburgh, Connellsville and No. 8 Districts. I hope I did not say that. (2654) I said on railroads serving those districts.

Taking my New York Central (Ohio Central) figure for the first period of 1932, which was 24,535 cars, those were all the cars of coal loaded on the New York Central-Ohio Central Lines in the period. The statement is correct that there has been no exclusion of Ohio Central loading in geographical sections of any kind. (2655) If you considered the Ohio Central as a system, it is an Ohio Central system figure, just as it is a Pennsylvania Railroad figure, a B. & O. figure, etc. It necessarily includes the cars loaded in the Inner Crescent field in the Kanawha district in West Virginia. The same is true of the B. & O.

I got the average figures on mine production in Ohio, Illinois and Indiana, from a publication of the United States Department of Commerce, Bureau of Mines, Coal Division, containing general statistical information. I will give you the title after lunch. It includes everything that reports to the Bureau of Mines, and is not confined to mines loading on railroads. Their production figures include a good deal more (2656) tonnage than the railroad shipment figures include. There was some separation by origin districts, but they were not origin rate districts, they were [fol. 2450] districts as named and defined by the United States Coal Commission some years ago. Those are coal commission designations. I don't think those figures have any bearing on the contour or the topography of the country, but it seems to me they do bear on the element of how much work is performed to serve the coal mines within the states by the railroads.

(2657) Referring to my exhibit which showed trends of tonnage to northeastern Ohio destinations over a period of years from beginning in 1922 and ending in 1931, separated by districts of origin, showing certain Ohio districts separately and showing the Pittsburgh district, the Fairmont district, etc., and showing coal originating in other Crescents as one of the last figures in each computation, those Crescent tonnages in that exhibit include the tonnages shown in my Exhibit 396.

In answer to Mr. Martin's question I had in mind showing those figures specifically. I had never done that before in this record.

With reference to a previous statement that in computing his distances from the interstate districts Mr. Ackerman did not construct any substitute routes in place of short tariff routes on the ground that the short tariff routes were unduly circuitous, I would say that you can cut the mileage considerable by making new routes. (2658) I think Mr. Paisley told me last night he cut his Pittsburgh district mileage something like 11 miles to Cleveland. I [fol. 2451] know that the distances from B. & O. origin districts and Pittsburgh, Connellsville and Fairmont can be cut considerably by the addition of different roads. As to whether in giving that answer I am speaking of the shortest possible route distances or speaking of reasonable direct routes which are in use for operating purposes—I

am sorry, but I don't know the difference between the two. I do not necessarily regard multiple routes as reasonable routes. The routes which I have in mind in answering the question would not be reasonable routes. The same answer goes to the Ackerman constructed routes in Ohio. Mr. Ackerman's routes, his tariff interpretation in making his tariff routes, I don't concur in. (2659) I don't think the routes were ever in effect. I mean they were not open under the tariff. Of course if you go back far enough before there was routing in the tariffs every route was a route. We used to have to go to the division sheet to get the recognized routes. That was not the situation in 1927 when those routes were closed, but I do not admit that prior to 1927 that tariff is susceptible to Mr. Ackerman's construction. I think the tariff would speak for itself.

With reference to the route Mr. Ackerman constructed to Huron, that is the proposed substitute route for the purpose of avoiding the long-and short-haul violation under the Ohio Law from the Cambridge district. I don't think that was his sole purpose. (2660) There may be one route [fol. 2452] in there that is a long-and-short haul violation, but certainly all of the tariff routes from the Cambridge district to Huron are not in violation of the long-and-short haul clause. There was one from the Cambridge district and one from the No. 8 district shown there, but they were not the sole tariff routes in those instances. I don't recall that they were the short tariff routes. If I knew the short route violated the long and short-haul clause I would substitute the next short route instead of constructing a new route, I would take the longer route. That is the theory upon which my distances would be computed when I was using the shortest tariff route, when I found one that was impossible to use I would use the next longer route.

(2661) I imagine about 95 per cent of the corrections I made of my own exhibit were due to the omission of the B. & O.-Dover-Valley Junction routes. I pointed out that Mr. Ackerman had overlooked that in his exhibit.

By Mr. Burgess:

I understand there is a junction point between the New York Central and Pennsylvania Railroad at Minerva, Ohio. I don't believe there is a joint rate published to Canton and Massillon from New York Central mines in

the Ohio No. 8 or the Middle Districts to Canton and Massillon via Minerva. The only tariff route that is open is via Alliance, Ohio. When those rates were reduced to Canton and Massillon under order of the Ohio Commission, [fol. 2453] Alliance was intermediate via the only open route at that time in existence from New York Central mines in connection with the Pennsylvania Railroad as a delivering carrier. (2662) I believe it is correct there was an open route from these mines in connection with the Wheeling & Lake Erie to Canton and Massillon via Minerva as a junction point. The opinion we gathered from the decision of the Ohio Commission was that there was nothing that prevented the opening up of a tariff route, New York Central, Pennsylvania, via Minerva, but when we sent our committee to consult with Mr. Herrold he indicated that that would not be satisfactory to the commission, and consequently the carriers kept the Alliance route open. Of course our interpretation was necessarily changed by reason of the position of the Ohio Commission.

Before we went down to see Mr. Herrold, I would agree with your interpretation that the reading of the decision clearly indicates that it was possible to keep open the tariff routes via Alliance at the old rate provided we put in the new rate via Minerva at the new rate.

By Mr. Herrold:

(2663) I don't know that you ever informed any of the carriers' representatives that your decision would prevent the application of the rate via the route over the New York Central to Minerva and the Wheeling and Lake Erie beyond. I think your position, Mr. Herrold, was that you did not want that route substituted for the route via [fol. 2454] Alliance. The specific and prime purpose of these gentlemen waiting upon you was to obtain the answer to this question, plus the question which appertained to routes via Akron.

By Mr. Burgess:

I don't know from a distance standpoint the route via Minerva is the shorter route than the route via Alliance. (2664) The route via Alliance was used by the Ohio Commission as a reasonable route and I have never checked to

see which is the shorter route. I never checked the distance via Minerva.

Referring to my Exhibit 391, where I show a number of destinations in Pennsylvania, one in New York, two or three in West Virginia and the rates from the Ohio No. 8 and Cambridge and Middle districts thereto, I have not in any of my exhibits which I have offered so far in this proceeding shown the tonnage which has moved during any representative period from these three Ohio coal producing districts to the destinations shown there. The tonnage that moves there is not large as compared with the tonnage which moves to the northeastern Ohio points which are under consideration in the proceedings before the commission now. To some of the points there is a considerable movement from Ohio. To Erie, Pennsylvania, Dunkirk, N. Y., there is some movement from Ohio mines. I have not checked the figures to see (2665) what it was, it used to be considerable when I worked with the New York Central. I can not remember any recent year from my [fol. 2455] form reports. I don't know whether there is any movement to these three West Virginia destinations from Ohio No. 8, Cambridge and Middle but I would surmise not.

Q. In connection with your criticism of Mr. Eldridge's exhibit 131, as I understood your testimony, you indicated that there were two rates which controlled the west-bound situation from the Freeport district as compared with the rates from the Pittsburgh district on the Bessemer and Lake Erie, those rates being $2.99 to Indiana Harbor or Chicago and $2.40 to Wyandotte as compared with $3.09 from Freeport to Indiana Harbor and Chicago and $2.50 to Wyandotte from the Pittsburgh district. Is that correct?

A. No, sir, I do not admit that those rates control any situation.

Q. I thought you stated that they were the rates responsible for the entire westbound situation as figured by Mr. Eldridge's Exhibit 131?

A. They are the rates which are responsible for the instance westbound where the Bessemer & Lake Erie, Freeport district is given lower rates than the Pittsburgh District, but that (2666) is not the westbound situation as a whole.

(Narrative continued:)

One of the reasons that was assigned for those two specific rates, $2.99 and $2.40, was because of rail and water competition from the Freeport district to these two destinations. I gathered that information from reading the rec- [fol. 2456] ords of the carriers. The Lake Cargo coal rate from the Freeport district to Conneaut Harbor is $1.31, a differential of 15 cents under Pittsburgh, $1.46. Certainly the fact that Freeport had a lower lake cargo coal rate is quite convincing in the minds of the officers of the Bessemer & Lake Erie Railroad as to why they should have a lower rate to the lake competitive points. It was for the same reason, again with a great deal of logic to support it, that when I came to Wyandotte I reduced the Wyandotte rate to 20 cents under Pittsburgh because of the 15 cent spread in the Lake Cargo rates. (2667) Any answer I would make as to the charge for water transportation from Conneaut Harbor to Indiana Harbor or to Wyandotte would be purely guess work on my part. I would say that the situation which existed when the rates were first established to meet water competition might have been productive of some good to the railroads, but that has long since ceased to be. The question as to whether it would be absolutely impossible during the season of lake navigation for the carriers to move this coal all rail against the lake cargo rates and the water charge and the handling charges at Conneaut Harbor is open to a good deal of discussion. The people that are receiving this lake cargo coal tell us that their net savings is not nearly what a bunch of figures that we might make indicate.

[fol. 2457] I stated that during the season of lake navigation this coal to Indiana Harbor and Wyandotte moved rail and lake. (2668) I think it is generally true that the rail movement, if used at all, is used some during the period when navigation is closed on the Great Lakes.

As to there being an exception to the intermediate application of the $2.99 rate, for example to Chicago, forcing rates lower from the Freeport group than from the Pittsburgh group to destinations in Central Freight Association territory, I would say that on points on the Nickel Plate and Erie, that is correct, and on the New York Central it is only half correct. They have rates to Mishawaka and South Bend which could be a little high higher if they were held to the Fourth Section. As to there being quite a number of

points on the Erie, the C. & E. and the Nickel Plate where the rates apparently bear no relation whatsoever to the intermediate application of the 2.99 rate, those lines for some reasons I don't know anything about (2669) and can't find out, saw fit to carry that differential straight back.

When I stated I was unable to check the application of the $2.40 rate via the Pere Marquette to Detroit, I noticed that that rate applied to Del Ray. I don't know that that forces the application of the rates to Detroit on the Pere Marquette. I do know this, that the Bessemer and Lake Erie were never able to get the other lines serving Detroit, or serving Detroit property to join them in the reduced [fol. 2458] rate.

In connection with Mr. Eldridge's Exhibit 136, where he showed the $1.13 rate applying from mines in the Fairmont district to Wheeling, it is my understanding that was a depressed rate to meet water competition and it was not depressed far enough to actually carry the tonnage, because the tonnage was moving by water. I don't know what kind of coal that is that is moving by water, whether it is gas or steam or both or domestic. There is a situation at Wheeling there that I am not familiar with. They have mines at their back door and they have river service, and to what extent they (2670) use one or the other I don't know.

The level of the rail rates to Portsmouth is controlled by the water situation. The C. & O. and Norfolk & Western maintain from their Crescent districts extremely low rates to Portsmouth, and consequently the B. & O. have published a very low line of rates from their Jackson County district to Portsmouth. It is my understanding of the situation that the rates are the all-rail rates published by the C. & O. and the N. & W.

There are iron and steel plants at Portsmouth, Ohio. They have coking ovens there. I don't know what the coal is that moves off the B. & O. from the Jackson County district (2671), I have a recollection they used to coke Jackson County coal when they had steel mills in Jackson County, but I don't know what they might do as to Portsmouth.

[fol. 2459] At your request I furnished Exhibit 395 which shows the tonnage from the Freeport district for the years 1925 to 1931, inclusive, to various destinations or via various movements. It is true that to Buffalo, Erie, Wyandotte, Chicago, Canada (all rail and car ferry) and Lake

Billed the rate from the Freeport district is lower than the rate from the Pittsburgh District, in all cases except some of the coal thereon shown to Canada moves via the Detroit gateway, and I do not understand that takes anything but the standard Pittsburgh district rate. It is true that is a comparatively unimportant tonnage, but there is some moving via that gateway. (2672) I don't know whether most of the other tonnage, with the exception of the Lorain tonnage, which moved in the year 1931, moved to what might be called Ohio miscellaneous points, points in the Mahoning and Shenango Valley. You have not got very much to distribute there.

Referring to Exhibit 368, supplemented by 394, there was 2,018 tons moved to Cleveland from the Freeport district in September 1932. That seems to be the only movement outside of about a car a month. There was no steady movement such as you find in 1930 and 1931, month by month, in that volume.

(2673) In my criticism of Exhibit 351, the point I was endeavoring to make was that if there is a point in the No. 8 District where the distance is 111 miles, as in the instance of the Marcoll mine, which is 111 miles from Can- [fol. 2460] ton, and that distance is recognized as representative of the haul for rate making purposes, then there does not seem to be any sound reason for throwing out shorter distances from mines where it is possible to cut down the actual distances by creating new routes. I think if you are going to make a rate that is going to apply for a distance as much as 111 miles any hauls performed by the carriers which are for 111 miles or less can not be deemed unreasonable. I don't think that it would follow that if the carriers selected (2674) a point like the Marcoll mine, which is apparently the most distant mine from Canton and Massillon shown on Eldridge's Exhibit 351, and that there was only one route in effect from that mine, it was not possible to make any other route, that that distance would control the rate from the entire group, regardless of the circuity of the routes you might put into effect from other points in the group.

Q. Well, take your points located in the Coshocton district, in the Middle district on the Pennsylvana Railroad, where the distance as figured by the Pennsylvania is 100

to 150 per cent circuitous as compared with the two-line route, would you say that it was improper to construct routes from these Coshocton sub-district mines via two lines simply because there was one mine in that district—I have gotten over into another district—because there was one [fol. 2461] mine in that district, the Tyrone mine where the reasonable direct route was the short tariff route and that was located about as far away from Canton and Massillon as mines in the Coshocton sub-district?

Mr. Orcutt: Mr. Examiner, I am going to have the witness answer the question, but I would like to have the record show we do not subscribe to the accuracy of Mr. Burgess' statement as to the percentage of circuity. If it is just used for purposes of illustration I have no objection.

(2675) Mr. Burgess: If the record does bear me out—I may be wrong, but if the record bears me out I am right. I am basing it upon my recollection of the record.

The Witness: I can only repeat my previous answer, that if you are going to make a rate that is reasonable from the distance from the Tyrone mine that rate should also be reasonable for a tariff route distance from a mine in the Coshocton district which is less distant than the distance from the Tyrone mine.

By Exam. Trezise:

Q. In other words, you think they should both be the same rate from both of those distances? Is that your point?

A. Well, of course, Mr. Examiner, they do.

Q. They do now?

A. And there is no attack upon that relationship. My whole point is that if you have a distance from Tyrone mine admitted to be reasonable and you have a distance [fol. 2462] from other mines less than reasonable distance, but because through a manipulation of a route you can cut that distance it is hardly fair to the carriers.

Q. But it is the rate on that short distance?

A. On that short distance, when from other mines in the same district you have mileages longer than the short tariff route distances from these mines where you cut mileage.

By Mr. Burgess:

I stated if we joined Cambridge (2676) district with the No. 8 district to Canton and Massillon we would increase the distances. There was no complaint before the Ohio Commission as to the rate from the Cambridge district to Canton and Massillon. There was no decision of the Ohio Commission with respect to any rates from the Cambridge district to Canton and Massillon, and those rates have not been reduced. The Ohio Commission did go to great length, though, to try to justify the split which they made in the Cambridge and No. 8 rates, and then in the instance of Cleveland they went to similar lengths to preserve the parity. They went to similar lengths in the opposite direction. I think one is just as amenable to distance cutting through constructed routes as the other.

In connection with my mine production (2677) from the various states in which I compare the mine production, I put that in as merely facts developed from public records, and if there is any relationship with that the proper operat- [fol. 2463] ing people of the railroads will use it to their best advantage. That deals with the subject as far as transportation is concerned not only on the question of volume of movement but distribution of it, or lack of it. If, in order to get a clear picture on this situation, you would have to find out from these various mines the extent to which the movement was diffused after it struck the railroads, then you are getting beyond the purely assembling service.

(2678) Referring to Exhibit 395, you will notice that for 1925 opposite Canada (all rail and car ferry) I show the symbol NR, meaning no figures reported. The Ohio Bureau of Coal Statistics Form S changed at the end of 1925 and gave us a separation which definitely allocated the Canadian bound coal. In 1925 and prior to that time we merely had a figure showing coal going via car ferry. I could not tell from that whether the car ferry tonnage terminated in a point in the United States, some of which I know did, or in Canada, and consequently I did not try to guess and showed it as is. I don't remember the precise figures for the tonnage that was not properly separated but it was very close to 228,000 tons.

During the course of the year I will furnish the tonnage that moved to Lorain during 1931 from Freeport.

By Mr. Gutheim:

(2679) The point about my average mine production is the fact to which I called attention, that the average is higher in Illinois territory than it is in the Ohio territory. [fol. 2464] I did not make any investigation as to what the situation is in Western Pennsylvania. Generally speaking, I believe that the tendency in recent years has been for average mine production to increase, that is, for smaller mines to pass out of the picture.

Referring to the statement in the first Commission's report in the Lake Cargo Coal Rates, 1925, page 527: "During 1923 complainant's mines in the Pittsburgh District shipped an average of 215,000 tons each, equivalent to about 15 carloads per working day."—I don't know whether today the average would be higher, because that figure is just complainant's mines, and the complainants in that case were the operators of the big mines in the Pittsburgh district. That might lend itself to a different answer.

(2680) Referring to Mr. Boden's Exhibit 380, where in the Pittsburgh, Freeport and Connellsville districts there is shown to be 251 mines which, in the year 1931, produced 52,900,000 tons, or about 210,000 tons each, based on that showing, the Western Pennsylvania districts have also considerably larger mines than Ohio in the same way that Illinois does.

The increases in the rates on iron ore at the time that the Railroad Administration placed the one increase on the Upper Lakes railroads only, were when most of the railroads were operated by the government. Some of them never were under Federal control. To the extent that [fol. 2465] they were the revenue all went into a common pot. When Federal control terminated in 1920 that common pot arrangement necessarily ceased. In the twelve years since there has been no change in the iron ore rates whereby the roads on the down side of the Lakes got that increase back.

The Bessemer, the Pittsburgh & Lake Erie in conjunction with the New York Central and the Pennsylvania are the roads that principally handle that iron ore from the Lake Erie ports to the furnaces. (2681) I believe those roads would handle up to more than 50 percent of the ore business from Lake Erie ports inland, but there are other im-

portant iron ore handling roads. I meant that the Pennsylvania and the P. & L. E. in conjunction with the New York Central and the Bessemer and Lake Erie together would handle 50 per cent or better.

On my Exhibit 397, the production for the individual railroads is a showing of the production of those railroads in all of the districts that they serve in the states named as reported by the Illinois Coal Traffic Bureau.

Referring to the testimony of Mr. Boden that in 1931 the production on the Montour Railroad was 5,518,942 tons, and that was all in one district, being the Pittsburgh district,—that Montour tonnage figure is greater than any other figure on this exhibit except the Illinois Central, I believe. (2682) I understand that Illinois Central production is in every district that the Illinois Central reaches in [fol. 2466] Illinois.

I recall my cross examination before the Suspension Board. They did not reduce it to writing, to my knowledge.

With respect to my inability to check Mr. Boden's figures of distances from the southern mines, I believe Mr. Boden's exhibits give the mileage tariff authority, but my principal difficulty was to find out where he started his distances on the mines he used. I don't know of any mine list filed with the Interstate Commerce Commission. (2683) I know that the railroads issue circulars containing lists of mines and I believe Mr. Boden showed reference to that.

When I said the ex-river rates should be increased to conform more closely to the Pittsburgh-Youngstown and Connellsville-Youngstown all rail rates, I am referring to the ex-river rates that were published and authorized by the Interstate Commerce Commission.

As to the difference between myself, representing the trunk lines, and the Wheeling & Lake Erie, being nothing more than the Wheeling and Lake Erie has reduced its all-rail rates to meet river competition and I want to increase river rates to meet rail competition, I think the situation goes deeper than that, because the Commission said, or broadly intimated that it was making a level of ex-river rates which would not disrupt the all-rail adjustment. I understand that that is what the Commission said and what they meant. If the situation developed where the ex-[fol. 2467] river rates do constitute a menace to the all-rail

situation I believe the Commission fixed those ex-river rates on a misunderstanding of the facts and therefore the ex-river rates are the ones that would be adjusted. (2684) Some of the disruptions of course would not occur until the all-rail rates are broken down. It has not occurred yet so far as the Pittsburgh district is concerned. It is true that it has been argued time and time again that the lake movement of bituminous coal to Buffalo would disrupt the all-rail rates, and it is still being argued with a great deal of force and more force every day. We have never reduced the Buffalo rate and I don't know of any major instance where we have reduced rates because of the establishment of water rates and disruption of the rail rate structure, but the carriers are getting in a position where this water competition has to be treated in some manner. They have steadfastly stood by their (2685) reasonable rates and have seen a lot of traffic diverted to these other forms of transportation, particularly water. Just how long we can afford to continue that I can't say here and now.

I have read the decisions of the Commission in the matter known as the Pittsburgh, Lisbon & Western case. I believe the Commission considered the competition as between consignees of coal, those located on the river on the one hand and those located in Youngstown on the other hand, and that Youngstown would have to meet that com-[fol. 2468] petition whether our rate ex-river from Conway and Colona is 77 cents or anything else.

I mentioned the rates of Southern Illinois to the Northwest as a low level of rates, and the rate of $3.65 from Southern Illinois to the Twin Cities was one that was in my record. Now that you mention it, I believe that $3.75 is the correst figure. (2686) It was an increase of 28 cents, I believe, at the time of the Lake Dock decision. I do not know that the carriers serving Southern Illinois have almost constantly, since that action of the Interstate Commerce Commission, been attempting to reduce that rate to a level lower than $3.47. I am not aware of that.

I know nothing about these co-called ideal conditions of transportation on the Holmes & Hallowell scale other than what I read in the Commission's decision. In my direct testimony I quoted from the decision that conditions in transportation are said to be ideal. I do not know

who said it or what was the basis of the facts out of which that conclusion was reached. I was not at the hearing in any of these cases.

I don't know that this 77 cent rate from Conway and Colona to (2687) Youngstown was prescribed at all. I don't recall the date of the decision, but it was sometime ago. The Trunk Lines' rates and the Wheeling & Lake Erie ex-river rates went into effect simultaneously, on July 16th. The railroads publishing the rates from Conway [fol. 2469] and Colona, as I understand the situation, refrained from the publication until they were ready to handle coal and until they were formally requested by the consignees. I know the structure that has been facetiously referred to as "Mt. Fitzpatrick" at Colona was under construction a considerable time. (2688) I do not mean since 1930, when the Interstate Commerce Commission authorized the publication of the 77 cent rate, but it took a good deal of time, it involved the acquisition of real estate and a lot of other things. Perhaps the physical construction of it took less than one year, but I think considerably longer than that to acquire the property. I don't know whether the construction of the Pittsburgh, Lisbon & Western Railroad branches has specific regard to the figure of 77 cents.

By Mr. Ballard:

(2689) Referring to the publication of the Bureau of Mines, entitled "Bituminous Coal Table, 1931, dated December 20, 1932, at Washington, D. C.," that is the one that this material came out of showing production by states and average production per mine by states. I do not know to what extent the mines in Illinois are served by more than one railroad. I don't know that it is a fact that there are very many more joint mines in southern Illinois than in Ohio. I don't know that it would be essential in order [fol. 2470] to determine the extent to which the origination of coal is concentrated or diluted that my figures would have to be supplemented by such information. If in the case of a mine originating 40,000 tons that tonnage is assembled by two, three or four railroads instead of by one, of course that means less coal per railroad (2690).

By Mr. Martin:

I understood, as I previously testified, that the Wheel-

ing and Lake Erie names its Cleveland rate to include points as far as Perry, Ohio. I understand that is true as to rates from the No. 8 district. I don't know about the rates from the Middle District or from Massillon. It is true on the map, Exhibit 14, that Perry is excluded from the Cleveland group insofar as Ohio No. 8 is concerned, but do you have the tariff there to see what the fact is? (Tariff handed to Witness; who examined same.) (2691) The rates on the Wheeling and Lake Erie and the other lines serving the Middle and Massillon districts will all be the same. That statement of mine on direct was incorrect, according to the tariff. The rate to points east of the Cleveland Switching District is 10 cents higher. I can't give you the exact boundary line of the Cleveland Switching District but it includes such points as Collinwood, on the New York Central, and Euclid, on the Nickel Plate. It goes as far east as Noble, The Standard Oil Company at Cleveland, which is a suburb of Cleveland but a different municipality. Collinwood is also a part of the city of Cleveland. I notice [fol. 2471] there at Noble, Ohio, certain Middle districts are on the Cleveland basis—$1.54.

By Mr. Tefft:

Referring to the district shown on one of my exhibits from the Hocking District to Cleveland, the figure 220 does not appear on the Exhibit that you evidently have referred to, which is Exhibit 19, 220 miles is the Hocking to Toledo figure as used by the Commission in I. & S. 774. (2692) That is an old mileage and all of the mileages that I have put in my various exhibits with respect to destinations in northeastern Ohio are based on my most recent findings. I do not know, in establishing this mileage of 220 miles what origin groups in Ohio were used. I don't recall the facts precisely, but the probabilities are they used the Hocking and Pomeroy districts combined to get 220 miles to Toledo.

Redirect examination.

By Mr. Orcutt:

(2693) Referring to my testimony this morning that the ex-river rates had, up to the present time, not disturbed the adjustment in the Pittsburgh district, I did not have in

mind in my answer the reductions of the Pittsburgh and West Virginia. They, of course, may be attributable to the effect of ex-river rates because the Wheeling and Lake Erie witnesses in this proceeding stated that their reductions were made at least in part to meet ex-river coal competition, and to the extent that the P. & W. V. reductions were made to meet the Wheeling & Lake Erie reductions, then the [fol. 2472] P. & W. V. reductions were made to meet ex-river competition. In the application for special permission to the Ohio Commission, the Wheeling & Lake Erie did not set up in that application the ex-river rates as a reason for the reductions sought.

By Mr. Day:

I will compute the figures for the New York Central to correspond with those I gave for the Ohio Central Lines and other railroads for the years (2694) 1931, 1932 and up to date in 1933, and have them available tomorrow.

[fol. 2473] S. C. MATTHEWS was called as a witness, and having been duly sworn, testified as follows:

Direct examination.

By Mr. Orcutt:

I am S. C. Matthews, Assistant Freight Traffic Manager, Pennsylvania Railroad, headquarters at Chicago, Illinois. I am proud of the fact that in last June I received my gold button in commemoration of fifty consecutive years of service with the Pennsylvania Railroad.

All of that time I have been connected with the Freight Traffic Department. I have occupied, to the best of my ability, practically every position in the Freight Traffic Department from that of minor clerk up to my present position. During a period of three years I was a bill clerk, telegraph operator, and acting local freight agent. The remaining forty-seven years was in either the Division or General Offices of the company. I was, during the years of 1914 and 1920, Assistant General Freight Agent and General Freight Agent at Pittsburgh, but while I occupied those positions I had no jurisdiction over coal in any territory

served by our lines. Since February 1, 1920, I have occupied the present position and have had jurisdiction (2696) so far as the Pennsylvania Railroad is concerned, with the rates on coal originating in the so-called Indiana producing groups and in the Illinois producing groups. In the Illinois producing groups the Pennsylvania Railroad serves [fol. 2474] but three mines, two of them at Collinsville, Illinois, and one at Pocahontas. We are an east and west line through Illinois.

I certainly do not regard my experience as bill clerk as having been in the operating department or qualifying me to give testimony as an operating expert. Neither do I consider that that three years' experience, added to the other forty-seven, qualifies me to testify as to any of the techniques of the operating department.

(2697) The Pennsylvania Railroad has two main lines across the Illinois territory involved in Docket 23922, its St. Louis Division, 75 miles in the involved territory, and its Peoria Division, 85 miles in the involved territory. The Pennsylvana Railroad serves both the Brazil-Clinton and the Linton-Sullivan Districts in Indiana, but it is not a rate-making line from the Linton-Sullivan District into Illinois.

I sat through the hearing in Docket 23922 but I offered no testimony in that case. Prior to that hearing I was more familiar with the adjustment from the Indiana groups because of the fact that we serve two groups there, while in Illinois, as I stated, we serve but three mines. I have a general knowledge of the coal rate situation in Illinois and I testified in Docket 23130, I believe it was, which was the so-called Thirteenth Section (2698) case involving the Illinois intrastate rates.

Q. Now, will you please proceed and state in your own [fol. 2475] words what, if any, part the Ohio rates or the Pennsylvania rates played in the adjustment of rates from the Indiana fields or from the Illinois fields?

Mr. Ballard: Does the question relate to the adjustment prior to the decisions in Docket 23130 and 23922?

Mr. Orcutt: Yes, sir, from his experience in years prior to that.

Mr. Ballard: I think that question is objectionable, Mr. Examiner, because whatever the fact may be it seems to me

to be totally irrelevant, inasmuch as the Commission itself has since made those adjustments.

Examiner Trezise: He may answer the question, if the Examiner understands what you mean by the question. You say what part did it play? What do you mean?

Mr. Orcutt: What influence the Ohio rates had upon the rate structure in Indiana-Illinois in the years of rate making history that he has been a part of.

Mr. Ballard: But this is all prior to the decisions in the two scale cases?

Mr. Orcutt: Yes.

Examiner Trezise : You may answer that.

Mr. Ballard. Exception noted.

The Witness: The rates as established from the Indiana [fol. 2476] (2699) producing groups and the Illinois groups never were made with any relation whatsoever to rates from producing groups in Ohio, West Virginia, or Pennsylvania. The rates from Indiana were made based upon and due to the competition with the coal that originated at and moved from the Illinois producing groups, especially those in Southern Illinois. The rates from Indiana into Illinois were depressed rates and were lower than what might be considered normal rates, due to this competition with the coal originating and produced at Illinois mines. The Illinois rates were low, due to the peculiar situation at Chicago. The situation with regard to the rates to Chicago was fully mentioned in the record made in the Thirteenth Section case, Docket 23130, as well as in the Illinois-Indiana Coal Cases, Docket 16340.

(Narrative continued:)

(2700) It seemed that the Commission recognized that competition, because in Docket 19468, Bash & Co., 167 I. C. C. 274, they prescribed rates to Mansfield, Mahomet, Champaign, Urbana, St. Joseph and Fithian. Again, in Docket 20574 and 20759, Barnhart Coal Company, 152 I. C. C. 55, they prescribed rates to Danville, Brewer, Georgetown, Ridge Farm, Chrisman and Charleston. Again, in Docket 20965, F. B. Clinton Company, 167 I. C. C. 244, they prescribed rates to Dudley, Conlogue, Paris, Vermillion, and Mays. All of the points just mentioned are in the territory involved in Docket 23922.

[fol. 2477] The original complaint in Docket 23922 was dated October (2701) 6, 1930, and sought reparation as

well as rates for the future to Teutopolis, Effingham, Casey, Greenup and Montrose from the Brazil-Clinton and the Linton-Sullivan Districts only. Sub. 1 was filed on November 5, 1930, and sought reparation and rates for the future to Charleston and Marshall, Illinois, from the Brazil-Clinton, Linton-Sullivan groups, and specifically from Petersburg and Terre Haute Districts. These two complaints and those in Dockets 19468, 20574, 20759 and 20965 were all consumers complaints.

The rates from Indiana into Illinois were being manhandled by these complaints of consumers, which gave no regard to differential relationships or groupings within the original territory. They dealt only with rates from a single group frequently, and in many cases from a few points within a group. It become apparent that to escape from the disastrous result of these consumers' complaints, a complaint ultimately would follow which would bring in issue all Indiana origin groups.

Sub. 2 of Docket 23922 is that complaint. It was dated November 5, 1930, and covered, as originally filed, stations in Illinois on the Pennsylvania Railroad, Dennison to Vandalia, inclusive, and Redmon to Decatur, inclusive, and stations in Illinois on the Big Four, Kansas to Pana, Harris Spur to Danville and Hilliary to Bloomington. (2702) It involved the rates from all producing districts [fol. 2478] in Indiana.

Following the filing of this complaint the Indiana originating carriers attempted to work out with the producers in Indiana a compromise adjustment. This compromise effort failed on account of the position of one of the important Illinois lines serving the Illinois producing fields, a party defendant in the Thirteenth Section Illinois case, Docket 23130, and a defendant in Docket 23922, Sub. 2, that had a minor interest as an originating carrier in the Indiana adjustment.

The effort to compromise having failed, the complaint in Sub. 2 was on April 10, 1931, amended to cover that section of Illinois on and north of the Southern Railroad, Mt. Carmel to Centralia, on and east of the Illinois Central, Centralia to Bloomington, through Pana and Decatur, and on and south of the Nickel Plate, Bloomington to Cheneyville.

The Brazil-Clinton group in Indiana has almost gen-

erally been looked upon as the key group in the adjustments of coal rates from Indiana, and so far as I know, differentials between the various Indiana origin groups have never been set by the Commission. The generally recognized differentials of long standing are: Linton-Sullivan group, 10 cents over Brazil-Clinton; Princeton, 7 cents over (2703) Linton-Sullivan; Boonville, 3 cents over Princeton. In attempting to work out a compromise as previously referred to, these differentials were not in some [fol. 2479] cases adhered to, especially to that part of the involved territory south of the Pennsylvania Railroad, St. Louis Division, where the haul was the same or less than from the Brazil-Clinton group.

During these negotiations the Thirteenth Section case against the Illinois intrastate rates was pending, and in that case the carriers had every reason to believe that rates would be prescribed on a so-called "dominant ton mile basis." The efforts to work out a compromise having failed, the Indiana carriers determined not to suggest to the Commission any specific rates, but in lieu thereof to submit mileage figures, with the suggestion that the rates from the Indiana groups to the involved territory be established on the same basis as was ultimately determined upon by them in the Thirteenth Section Illinois case. The working out of these mileages began about December 20, 1930, and it was not completed until a very short time before the hearing, which was held beginning October 27, 1931.

(2704) I am appearing in this case in behalf of the petitioning carriers in the Thirteenth Section case. There will be another witness who is connected with the railroad that serves the Southern Illinois and Centralia district in Illinois, as well as three of the Indiana producing groups who will probably be able to go more into detail on the Illinois adjustment than I can because of [fol. 2480] the fact, as previously stated, we have only in Illinois an east and west line. The rates in Illinois were largely controlled by the Springfield-to Chicago rate originally. Later on, in the adjustments made in the coal rates generally under General Order 28, Southern Illinois became the base group in fixing rates to Illinois. The rate from Southern Illinois was then used in arriving at the rates from the Belleville, DuQuoin and Springfield groups.

I do not recall offhand the exact differentials. The rate from the Indiana mines was related Brazil-Clinton to the Springfield group, and in the Illinois-Indiana Coal Cases, upon a joint hearing with the Illinois Commission, the Interstate Commerce Commission reduced the rate from the Brazil-Clinton group from $1.60 to $1.55 to Chicago. The Illinois Commission ordered the rates (2705) reduced from all groups in Illinois to Chicago 5 cents per ton; and that action caused rates which we considered to be subnormal to be established in Illinois, and those were the rates that were covered by Docket 23922, in which the Commission required the Springfield rate to be restored to Chicago to $1.60, permitting the Illinois Commission, for the shorter hauls, to set the rates that would govern.

The territory that is set forth in Docket 23922, as outlined in Exhibit 143 introduced by Mr. Durham, is insignificant as compared with the Central Freight Association as a whole. The consumption of coal within this terri- [fol. 2481] tory is in no way comparable with the consumption of coal in Northeastern Ohio, that is, at such points as Cleveland, Youngstown, Akron, Lorain, etc. Neither is the movement of coal into that territory in Docket 23922 comparable with the movement of coal generally in other parts of Illinois—Chicago, Peoria, Rockford, Freeport, Springfield, and East St. Louis, which are either larger in population or more active industrially. The preponderance of the coal that moves to the Illinois points just mentioned does not originate within the Indiana groups, but originates almost exclusively in the so-called Illinois territory.

(2706) During the negotiations of the Indiana carriers in the effort to compromise with the Indiana operators, I investigated the movement of coal from the Indiana mines to points on the Pennsylvania in the territory outlined on Mr. Durham's Exhibit 143. The period covered was the first ten months of 1930, and during that time we handled to our stations in that territory from the Indiana mines a total of but 246 cars, an average of approximately 24 cars per month, or, based on an average loading of 45 tons, which would amount to 11,170 tons. Of this tonnage 115 cars originated at mines in the Brazil group reached directly by the Pennsylvania Railroad.

The rates between the points involved in case 23922,

which rates I have helped make for years, have not previously nor do they now have any connection with rates [fol. 2482] on coal in Ohio or Pennsylvania. There is a peculiar situation, as I have explained, in Illinois, due to the enormous amount of coal going into Chicago that forces, from the Illinois mines, rates that are lower than I would consider normal rates, and with that condition I see no reason why the rates in Illinois (2707) or from Indiana into Illinois should be used as a yard stick in fixing the rates from Eastern Ohio or Pennsylvania. Illinois and Indiana have always been tied up, one with the other, with the possible exception of the rates from Illinois into Indiana. From the producing groups in Indiana to Indiana there is a level of rates approved by the Indiana Commission as the result of a compromise that are higher than those which the Commission has prescribed in Docket 23922, and the carriers have not to any extent published rates from Illinois into Indiana.

Cross-examination.

By Mr. Ballard:

The territory involved in the compromise to which I refer were rates from all producing groups in Indiana to the territory that was outlined in Mr. Durham's exhibit in this case, 143, that is, in Illinois. (2708) There were rates involved in Indiana, but preceding the Indiana-Illinois controversy. The rates involved in the compromise were from all Indiana producing groups to all points in the State of Indiana.

It is correct that the history of the Illinois-Indiana ad- [fol. 2483] justment and the circumstances surrounding it prior to the decisions in these two scale cases had brought about what I and other officials of the carriers felt were depressed rates, and I might add, and still do, it is my understanding the Commission's order in Docket 23130 and 23922 purports to be a maximum reasonable level. (2709) In Docket 23130, I believe, they were fixed as specific rates. I haven't the order, I can't answer definitely that the Commission said not less than a certain amount. I explained that we only have three mines in Illinois and that we are an east and west line. I stated I believe it to be the case that the Commission's orders in Dockets 23130

and 23922 had the effect of fixing maximum reasonable rates, but the Examiner calls attention to the language used, and I say I haven't the order. (2710) The order is the best authority, of course.

I don't know just what effect the rates as prescribed in Docket 23922 will have upon the rates which they prescribed in the other cases that I have referred to (2711), wherein they had previously fixed rates, because the rates under the 23922 scale have not been checked out, but I do know that in the attempted compromise the producers were willing to accept increases in the rates named in those dockets by the Commission. The compromise referred to is in Indiana to the territory involved in 23922, the one that failed of adoption, not the Indiana Thirteenth Section [fol. 2484] compromise; that was disposed of after many months of hard labor. We attempted to compromise from the Indiana origin territory to the Illinois territory outlined in Mr. Durham's Exhibit 143. Maybe you are confused somewhat as to the statement which I made as to a compromise in Indiana. That compromise was worked out on the suggestion of the Interstate Commerce Commission in the Thirteenth Section (2712) case that the carriers had filed against the intrastate rates in Indiana on coal and involving the rates from all producing points in Indiana to all destinations in Indiana. I believe the Southern Railway declined to go along with the compromise there, the Thirteenth Section Indiana case.

Following the failure of that compromise, from Indiana to Illinois the carriers determined that they would not submit to the Commission any defense, but would submit to them mileage figures with the statement and suggestion that in connection with these mileages the Commission should fix for that traffic the same level of rates as they ultimately fixed in the Thirteenth Section Illinois case, Docket 23130. (2713) As I said, having but three mines in Illinois we did not take an active part in the Illinois Thirteenth Section case. The carriers maintained that the intrastate level was too low, and they tried to show that in [fol. 2485] that case. I don't know that when 23922 came along we stood on any showing made in the earlier case 23130. We had every reason to believe that the Commission had determined upon the level they would use in fixing the rates under 23130. We therefore assumed that, having

arrived at that conclusion, they would use the same yard stick in fixing rates from Indiana into Illinois.

I don't know yet what effect upon the rates specifically prescribed in 167 I. C. C. and 152 I. C. C. the 23922 scale will have; I haven't checked it out. (2714) When I used the expression, "dominant ton mile basis" which I said the carriers expected the Commission to prescribe in 23130, I meant we were told that the Commission had under consideration a dominant ton mile scale. What that scale was we did not know. I don't know what the father of that name for scale had in mind when he used it.

Examiner Trezise: I am free to say that the present Examiner invented that term, and I don't think the Commission was the authority for it.

(Narrative continued:)

I heard that term from those who were attending the hearing in Docket 23130. I did not hear the Examiner in Docket 23922 make any reference to it.

(2715) I can't define the territory in which the 23130 scale applies; I am not sufficiently familiar with the case. [fol. 2486] I pointed out the tonnage moving within the 23922 territory is insignificant, by comparison for example with the tonnage moving to Chicago. I don't know how the 23922 scale, if applied to Chicago, would affect the rate which the Commission set. I think the Chicago rate is a depressed rate. I may think also that the scale in 23922 is also depressed. As to whether that was prescribed as a maximum reasonable scale, the order will speak for itself. The sparsity of the tonnage in the 23922 territory is one of the facts that would sometimes enter into the making of a rate, but not always. There are more important conditions, in my opinion, than that. (2716) If that he the only and compelling reason Northeastern Ohio is entitled to a lower rate level than 23922 scale territory, but I don't consider that it is the compelling reason in fixing rates on coal.

By Mr. Burgess:

The three cases before the Interstate Commerce Commission which I mentioned was the Bash case, the Clinton case and the Barnhart case. They were all consumers' cases in the sense that complaints were filed by consumers of coal

or their representatives. They each sought reparation as well as rates for the future. The destination territory involved in 23922 involved all of the destination territory involved in these three complaint cases before the Interstate Commerce Commission and some more territory. The [fol. 2487] 23922 territory was more extensive and included all the destinations in these three complaints. (2717) The Commission has rendered decisions in the three interstate cases referred to. I don't know what their formula was that they used, whether that was the Holmes & Hallowell scale or not. As I say, I haven't checked out the rates under 23922 to these points and I can't determine how it compares. They awarded reparation in some of those cases, whether all or not I don't know, but the payment of that reparation, I understand, was contested. The destination territory was insignificant, as far as volume of coal movement is concerned, as compared with Northeastern Ohio. (2718) I did not attend the hearing in 23922, and as near as I can remember I did not attend personally any of the other three cases.

I was before the Illinois Commission in one State case and before the Indiana Commission in several involving coal rates. The carriers in that territory in case 23922 did not use the Ohio coal rates as indicating a maximum reasonable level, showing that the Illinois rates and Indiana rates should not be reduced because the Ohio rates are much higher. It is possible that some witness may have put in some Ohio figures in some of the other cases, but I know that I did not and I have always maintained that they were not related.

Mr. Day: I think I was in all three cases, Mr. Burgess, and my recollection is that the Ohio rates were not re- [fol. 2488] ferred to in any of them.

Mr. Burgess: I unfortunately picked the wrong three cases, then, in my comparison.

(Narrative continued:)

In my statement as to the loading of coal into this territory on the Pennsylvania Railroad (2719), I used 45 tons per car because of the number of cars I had developed in my study in connection with the compromise. I had the actual billing, and the weight of the coal as divided by the number of cars, averaged, to be exact, 44.57 tons per car. I

don't know whether any of the other carriers serving the Indiana coal producing districts worked out similar figures as to car loadings, because I worked that out for my own information. I don't know what the others did. It was not used in the case at all. I don't know whether they were higher or lower than my figures.

The rates into Chicago and other large consuming centers prescribed by the Interstate Commerce Commission are actually higher than they are to the miscellaneous territory involved in 23922. Whether the level is lower or not I don't know. (2720) I mean that the rate prescribed by the Commission from the Brazil-Clinton group to Chicago is higher than the rate would be under 23922 from the Brazil-Clinton group to any point in the territory involved in that case. The rate prescribed to Chicago in the Illinois-Indiana cases from the Brazil-Clinton group was $1.55. I don't remember [fol. 2489] the distance, because we are not the short line. I believe the rates as worked out under the scale involved in 23922 will be lower from the Brazil-Clinton group, because of the shorter distance, talking about the actual figure of the rate. I would say that the distance from the Brazil-Clinton group to Chicago proper is higher than it is from the Brazil-Clinton group to any point in the involved territory in 23922.

(2721) I don't know how the loading of coal into the large destination points, such as Chicago and East St. Louis, compares with the loading of coal to cities in Ohio involved in this proceeding. I don't know anything about train rating or how it compares. I don't know how the per diem reclaims compare, or how absorption of switching compares.

I referred to the three cases that were brought before the Interstate Commerce Commission, the Bash, the Barnhart and the Clinton cases as consumers' cases, as differentiated from cases brought by coal producers. Ordinarily consumers' cases are under Section 1, not always.

By Mr. Martin:

(2722) Referring to the fact that the Pennsylvania Railroad Company is not the rate making line from the Linton-Sullivan group, the reason that is true is an examination of the map will show that the Pennsylvania Railroad from the Linton-Sullivan group moves north to Indianapolis, [fol. 2490] and then we would have to haul the traffic back

from Indianapolis to the Indiana-Illinois line. There are other routes that move up from the Linton-Sullivan group—the C. & E. I., the Milwaukee and the Monon, that have more direct lines that we do. Which one of those is the rate making line would all depend upon the destination territory. It all depends upon the points into that 23922 territory. The ordinary way that rates are made would be to take the line which would be most direct to the particular destination involved.

By Mr. Gutheim:

(2723) When I was comparing the respective levels of the Brazil-Clinton rate to Chicago and what the rate would be on the 23922 scale, I didn't have anything specially in mind, but the Pennsylvania would undoubtedly expect to handle coal to Chicago, even though it is somewhat circuitous. I don't believe you got me correctly, Mr. Gutheim, when you assume that I testified as to the level of the rates. I talked about the rates in and of themselves under 23922, that they would become, in comparison to the actual figure to Chicago, $1.55. I didn't make the statement that the rate to Chicago would be higher than the rate fixed by the 23922 scale for the same distance, not that I recall. I said I didn't check out any rates under the 23922 scale. (2724) I didn't say the rate from Brazil-Clinton to Chicago would be higher than for the same mileage under 23922.

Q. My recollection is that you also made some statement [fol. 2491] to the effect that "we understood the Commission was considering a dominant ton mile scale." Did you mean just that or did you have reference only to an understanding of what the Examiner may have said in the course of a hearing?

Examiner Trezise: Let's get that straight. That "dominant ton mile" term was never used in any hearing at all. It was used in connection with the conferences with respect to an agreement in the State of Illinois as to what the rates ought to be and was not used in the hearings in any of these cases that I know of.

Mr. Gutheim: I am a bit curious, Mr. Examiner, to know just what Mr. Matthews had in mind, when he said "we understood the Commission was considering such things", and I don't know that he wants to leave the impression here

that he had any information of what the Commission was considering in any case.

Examiner Trezise: May it be satisfactory to every one if I say that the Commission did not, to the Examiner's knowledge, consider that word "dominant" in connection with their opinion at all, and it was used only in these conferences (2725), and the Examiner submitted a scale to the parties constructed on what he thought was the dominant ton mile scale, and parties could not agree upon it and that ended it.

[fol. 2492] By Mr. Gutheim:

Q. And was it that thought you were referring to, Mr. Matthews?

A. It was, yes, sir, only I stated that the Commission was considering it, we understood the Commission was considering the dominant ton mile scale, and when I said that I was looking upon the Examiner as being a representative of the Commission, that was all, and as he stated, that reference did not go out in anything except the informal conferences.

By Mr. Ballard:

(Narrative continued:)

That term was never used at all in any of the conferences that we held attempting to work out a compromise of the rates that were involved in 23922. We only had in mind that the Commission was going to do something in the Thirteenth Section case in the way of fixing rates. (2726) That was the Illinois Thirteenth Section case.

By Mr. Herrold:

As to there being any reason why rates on coal in Illinois or between Indiana and Illinois should be on a lower level than the rates between points in Ohio, as I have stated, the Illinois rates, I think, even in 23922 were too low. If they were upon a normal level there might not be any reason why the rates in Ohio should be higher than they are in that territory, unless there are certain conditions of which I know nothing.

[fol. 2493] By Mr. Ballard:

Referring to the question whether the distance from the Brazil-Clinton district to Chicago being 185 miles, I don't know whether the 23922 scale for 185 miles is $1.80 or not. I haven't the scale before me. I don't know what the distance is, nor have I the scale. I could not answer.

By Mr. Day:

I would have to know what the minimum as well as the maximum distance was. If that Chicago rate was blanketed back 80 miles I would have to take that into consideration.

By Mr. Ballard:

The proper way to test the reasonableness of coal rates is to consider destination group that is produced by the application of the key point rate to intermediate points. I would think that in changing, for example, the No. 8 rate to Cleveland, you ought not take the Cleveland distance, but the distance to the destination blanket that comes about in that manner.

H. H. Washer was called as a witness, and having been duly sworn, testified as follows:

Direct examination.

By Mr. Day:

(2727) My name is H. H. Washer, General Coal Agent, C. & E. I. Railway, Chicago, Illinois. I am in charge of the coal traffic and rates of the (2728) C. & E. I. Railway Company, and have held my present position approxi- [fol. 2494] mately two years.

I was with the L. & N. Railroad for twenty years, and about twelve years of that time was spent in the Traffic Department. I am familiar with the coal rate adjustment in Illinois and Indiana, and have been requested by the petitioners in the Thirteenth Section proceedings here to appear and testify in their behalf regarding the coal rate adjustment in Illinois and Indiana.

I am appearing in this case in behalf of petitioning carriers, and my sole object is to explain in a brief way the rate adjustment prevailing within the State of Illinois and from Indiana into Illinois, which has already been mentioned in this proceeding.

At the outset I wish to introduce a map exhibit showing (2729) the location of the Illinois and Indiana mine fields.

(Exhibit 398, Witness Washer, received in evidence.)

The red lines drawn thereon depict the destination territory involved in the most recent coal case affecting this territory decided by the Interstate Commerce Commission, Docket 23922, Sub. 2, now in mimeograph form. Considerable emphasis appears to have been placed upon the conclusions of the Commission in this case and in other cases involving Indiana and Illinois coal rates, and the purpose of this exhibit is to present a picture of the several coal producing sections in that territory. Not only is the State [fol. 2495] of Illinois underlain with vast coal deposits from the north to near its southern extremity, but the same is true of that part of the State of Indiana lying adjacent to the Illinois State line and extending from the Ohio River about 125 miles northward. Farther to the south is the West Kentucky field, likewise producing large quantities of coal, competing in the same consuming territory where Illinois and Indiana mine operators must find their markets. As a natural consequence, intense competition exists at every point in the State of Illinois which is a market for coal. The C. & E. I. Railway serves the Southern Illinois, Springfield and Danville groups in Illinois, and the Brazil-Clinton, Linton-Sullivan and Princeton groups in Indiana, consequently has a vital interest in the coal (2730) rates in this section.

The rate structure in this section is an institution peculiar in and of itself, being naturally affected by this highly competitive condition. Every rate on which coal is moving in this section, established voluntarily by the carriers or by orders of the Interstate Commerce Commission or Illinois Commerce Commission, or now in course of adjustment, has been and is predicated on the competitive situation, and without regard to coal rates existing elsewhere. I am not aware of any instance where the Ohio rates or

any others have been given the remotest consideration by either the carriers or the two Commissions in fixing intra- [fol. 2496] territorial rates in Illinois. Undoubtedly the intense competition existing has been the cause of so much litigation involving the transportation charges maintained by the carriers in this section, which eventually forced the carriers to appeal to the Interstate Commerce Commission through Thirteenth Section proceedings in an effort to stop the constant chiseling at rates which, generally, by all acknowledged standards of reasonableness, were already too low. I refer here to the Illinois Thirteenth Section case, Docket 23130, 182 I. C. C. 537, 183 I. C. C. 751.

The prevailing rates from Illinois mines into Central and Northern Illinois are largely the result of the adjustment made in response to the orders of the *the* Interstate and (2731) Illinois Commerce Commissions in the latter case. In their findings the Interstate Commerce Commission restored to the carriers the 5 cents per ton reduction from the Southern and Central Illinois fields ordered by the old Illinois Warehouse Commission several years previous, likewise awarding increases in the rates to other points in Illinois, such as Champaign, Decatur, etc., over rates that had been previously reduced by order of the former Illinois Commission. This case was heard jointly before the Examiners of both the Interstate and Illinois Commissions, and in rendering their decision on the points specifically involved in the Thirteenth Section proceeding, the Interstate Commerce Commission left it in the hands of the [fol. 2497] Illinois Commerce Commission to prescribe the adjustment to the territory intermediate to Chicago, excepting to the points where the Interstate Commerce Commission assumed jurisdiction. The Illinois Commission discharged this duty by prescribing reduced rates to key points, such as Peoria, Bloomington, Gilman, Hoopeston, Danville, etc., from Southern Illinois, indicating that they expected the carriers to maintain the existing relationship between Southern Illinois and other mine groups in the State.

In order to gain a clear conception of the condition (2732) which actuated the Illinois Commission in determining the rates fixed at these points, it is necessary to go back to a decision of the Interstate Commerce Commission several years ago in the so-called Hoopeston case. This case origi-

nated in 1924 and was originally decided by the Commission in September, 1925, under the Commission's Docket No. 15817, 102 I. C. C. 269. Complainants alleged that the rate on coal from Big Four mines in Southern Illinois to Hoopeston was unreasonable and prejudicial, compared with rates maintained from the same mines to Chicago, Illinois, Indianapolis, Indiana, and Vincennes, Indiana. Hoopeston is located on the C. & E. I. Railway, 100 miles south of Chicago, and is likewise reached by the Nickel Plate. At the time of this complaint the Chicago rate of $1.95 per ton was applied from the Southern Illinois field [fol. 2498] to Hoopeston. In their original decision, the Commission held that the rate assailed was not unreasonable, likewise that it was not prejudicial inasmuch as the conditions affecting the rates to Chicago, Indianapolis and Vincennes were not comparable with those affecting the rates to Hoopeston. At the time this case was decided another case was pending before the Interstate Commerce Commission attacking the rates from Indiana mines to Hoopeston, Docket 16048, 113 I. C. C. (2733) 606. The latter case was decided in July, 1926, the Commission prescribing reduced rates to Hoopeston from the Indiana mines involved. Subsequently both of these cases were reopened, the latter on petition of the defendants and the former on petition of the complainants, and further argument on the two cases was heard on a consolidated record in Docket 16048. The Commission's final decision in the latter case was rendered in October, 1927, and as a result thereof the rate from the Southern Illinois field to Hoopeston was reduced to $1.80 per ton—Docket 16048. The average distance for which this rate was prescribed was shown in that case to be 234 miles. The Commission's reversal of opinion seems to have been based entirely upon their belief that Hoopeston, by virtue of its location on the line of the C. & E. I. intermediate between the Southern Illinois mine field and Chicago, is entitled to the benefits ensuing [fol. 2499] from the heavy volume of coal traffic moving to Chicago. The following is an extract from their report in Docket 16048:

"The rate of $1.95 cents from the Southern Illinois group to Chicago also applies to the destination territory in Illinois immediately north of Hoopeston. The latter point, being on the direct line of the C. & E. I. from the mine

groups here considered to Chicago, is entitled (2734) to the benefit of such economies of operation as a result of the heavy volume of coal traffic moving to the Chicago District."

In fixing lower rates to the territory intermediate to Chicago in connection with the Illinois Thirteenth Section case the Illinois Commission was undoubtedly influenced by the above quoted remark in the Hoopeston case. As a matter of fact, the Illinois Commission quoted the above extract in their report, and added that the reasoning of the Interstate Commerce Commission indicated therein was persuasive in connection with other points intermediate to Chicago involved in the proceeding before them. In their findings, the Illinois Commission simply adopted for intrastate application the rate to Hoopeston previously fixed via interstate routes by the Interstate Commerce Commission in Docket 16048. In determining the rates prescribed to Bloomington, LaSalle, Gilman, Danville, Peoria and other points, the Illinois Commission again cited the $1.80 rate prescribed to Hoopeston and the conditions actuating [fol. 2500] it, indicating rather conclusively the rates they fixed to the other points involved were largely predicated upon the same condition.

It is manifest from what I have just said that all of the rates today from the Central and Southern Illinois (2735) fields to Northern and Central Illinois consuming territory intermediate to Chicago reflect the influence of the low Chicago rate. That the rates prevailing from the Illinois and Indiana mine fields to Chicago are much below a maximum reasonable basis can hardly be denied. Taking Southern Illinois, for example, the $1.95 rate for the average group distance of 340 miles yields only 5.73 mills per ton mile. In this connection it is pertinent to mention a case where the Interstate Commerce Commission held a ton mile yield of 5.27 mills on coal for a 922-mile haul to be inadequate. I refer to I. & S. Docket 1787 (89 I. C. C. 573), involving rates from L. & N. Railroad Crescent mines to the Twin Cities, wherein the Commission prescribed a rate of $5.40 per ton in lieu of the former rate of $4.86, the $5.40 rate yielding 5.86 mills per ton mile. The Interstate Commerce Commission has cited the rates from Illinois

and Indiana mines to Chicago as being below a reasonable maximum basis in several cases, notably the Illinois-Indiana Coal Case, Docket 16340 (128 I. C. C. 270), where the Commission said:

"There are certain conditions that tend to keep the rates [fol. 2501] to Chicago at or below a reasonable maximum level. Chicago is the greatest market in the country and producers in all the districts directly or indirectly (2736) concerned in these cases seek to sell there. All-rail and rail and lake carriers converging from different directions and individually strive to participate in the traffic to the greatest extent possible."

Again, in the Thirteenth Section Case, Docket 23130, 182 I. C. C. 545, the Commission said:

"The size and importance of Chicago as a coal market result in competitive conditions not present at other Illinois and at Southern Wisconsin points. Chicago is the greatest coal market in the country and consumes annually from 30 to 35 million tons. The rate level to Chicago is the result of keen competition between producers of Eastern coal, moved both by rail and by rail and water, and producers of Illinois and Indiana coals. Keen competition also exists between carriers that have their own rails extending from particular groups in Illinois or Indiana to Chicago and whose principal interest is to move coal from their own mines. These conditions, among others of similar nature, resulted in the establishment many years ago of a competitive basis of rates to Chicago. These rates have been maintained more especially to enable Illinois producers to dispose of their coal in competition with Eastern coal."

[fol. 2502] While the Interstate and Illinois Commerce Commissions (2737) have been influenced by the low Chicago rates in prescribing rates to Illinois territory intermediate to Chicago, they have steadfastly refused to recognize the Chicago rates as a proper measure for rates into the territory north and west of Chicago.

As further evidence of the conditions which confronted the Commission in determining the level of the Illinois rates in the Thirteenth Section case, it is significant that the Commission found it necessary to prescribe a lower scale of

rates into Peoria from the Springfield and Fulton County-Peoria groups than at other points. The Commission recognized that the competitive situation existing at Peoria from these particular sections demanded separate treatment.

The conditions which led the two Commissions to prescribe lower than maximum reasonable rates to Illinois territory intermediate to Chicago are not present in the case of coal traffic moving from Indiana mines into Central and Eastern Illinois territory lying west of the direct lines leading from the Indiana mine field to Chicago, nevertheless the competitive influence makes it necessary that the Indiana rates into this territory be likewise measured below a reasonable maximum level. Since Illinois mines enjoy the benefit of a comparatively low level of rates into that section, (2738) it is essential that Indiana mines have a corresponding level if they are to be permitted to do business in [fol. 2503] these highly competitive markets, the section involved in Docket 23922, particularly.

In deciding the issue involved in Docket 23922, Sub 2, which is now in mimeograph form, the Interstate Commerce Commission prescribed a basis for computing coal rates from Indiana mines to Central and Eastern Illinois territory outlined on my exhibit on basis of a scale beginning at 65 cents per ton for distances 10 miles and under, ranging up to $2.15 per ton for distances up to 300 miles. The history of this case has been recited by a previous witness and it is not necessary, therefore, for me to review it in detail. However, I would like to point out that the most important factor which the Commission had to consider in reaching a decision in this case was the intensive competition between Indiana and Illinois mines in the section involved. A glance at my exhibit will disclose that the destination territory is completely surrounded by mine fields, being encompassed by the Springfield and Belleville groups on the west, the Centralia, DuQuoin and Southern Illinois groups on the south, all (2739) the Indiana groups on the east, likewise the Danville, Illinois group, and on the north the Northern Illinois and Fulton-Peoria groups. To have established a level of rates higher than had already been fixed from competing Illinois mines would have simply meant shutting Indiana coal out of these markets. Under [fol. 2504] the circumstances, it is obvious that the rates

fixed by the Commission in Docket 23922 are predicated strictly on competitive conditions peculiar to the territory where they were prescribed. The following extract from the Commission's report substantiates that:

"Our findings for the future are primarily to more properly align these rates with the rates from competing mines rather than the fixing of maximum reasonable rates for the services rendered."

That is taken from the Commission's mimeographed report in Docket 23922, that is, in its report on reconsideration. For the convenience of the Commission I would like to cite several cases involving coal rates within our territory: Illinois Coal Cases of 1920, 64 I. C. C. 751; Lake Dock Coal Cases, 89 I. C. C. 170; Iowa Coal Cases, 128 I. C. C. 293; Holmes & Hallowell Case, 69 I. C. C. 11; Coal from the Southwest to Missouri River, 89 I. C. C. 73; Sioux Falls Case, I. C. C. 261; Chicago Coal (2740) Cases, 128 I. C. C. 265; Intrastate Rates Between Points in Illinois, 182 I. C. C. 537. All of these reports and decisions go into considerable detail regarding the rate history and the potent factors that were taken into consideration in the fixing of the coal rate levels in Mid-Western Territory.

In closing I wish to say again that my sole purpose in this proceeding is to throw some light on the existing adjustment from Illinois and Indiana mine fields into Illinois territory. I have no direct interest in the measure of the Ohio [fol. 2505] rates for the very simple reason that there is not and has never been any relationship of any character between the intraterritorial rates within Ohio and those within Illinois. What the Commission does in the instant case will have no effect upon our rates in Illinois, unless the Commission is persuaded to adopt for application in Ohio the general level of rates now obtaining in Illinois or from Indiana into Illinois, on the grounds that these represent reasonable maximum rates for general application everywhere. I do not believe such a conclusion can be reached in view of the facts which I have recited.

Cross-examination.

By Mr. Ballard:

[fol. 2506] When I spoke of the general level of rates in

effect in Indiana and Illinois I had in mind the rate structure in Illinois as a whole, including rates that have been established and are being established voluntarily or by order of the Commission, including the scales. The scales are higher than a lot of these point to point rates, the points intermediate to Chicago. The 23922 scale would increase the rates to points intermediate to Chicago, and it would increase the Chicago rate. Referring to Exhibit 398, the 130-mile scale, that was the Springfield group, certain mines in the Springfield group and the Peoria group into Peoria only. That was not applied from (2742) the entire Springfield group; I would say from mines in the vicinity of Springfield, to Peoria, as a destination point. The Commission seemed to think it was necessary to make a scale to do that. The 100-mile scale applied at specific points involved in the Thirteenth Section case. In other words, the carriers cited certain rates which the Illinois Commerce Commission had ordered, contending that they were too low. The Interstate Commerce Commission rectified that condition by prescribing the 100-mile short haul scale as a minimum at these points. Generally speaking, I would say those rates were within the General Illinois section. One particular point was from Springfield to Decatur, Illinois. There were some points over on the Burlington (2743) around Macomb, from the Fulton County group, I think it was. Decatur is in the northeastern boundary of the Springfield group. The 100-mile scale was extended to some extent over into that 23922 destination territory from [fol. 2507] the Springfield group, and was the yard stick that the Commission used in requiring the increase of these State rates. That scale was then extended to 130 miles for the purpose of requiring increases in certain rates from Springfield to Peoria in the original decision. The supplemental decision modified that scale. The purpose of it was to raise State rates.

The 23922 scale was not a Thirteenth Section case, neither would I construe it as intended to be a maximum reasonable level. (2744) As I say, the Commission fixed these rates in Illinois. They are in the nature of minimum rates to points like Champaign, Decatur, points within this territory affected in 23922. Indiana producers, if they are going to do any business over there, must have a com-

petitive level of rates. The case was brought under Sections 1 and 3, the Indiana case, 23922. The Commission originally fixed the same scale up to 100 miles as they had fixed within Illinois for 100 miles. It was the same as the 130-mile scale, too. In the supplemental decision they increased those rates 5 cents per ton. They have increased the scale that much, but they have provided a different basis for computing mileages, and I take it from the language of their report that was their purpose of increasing the scale.

The way I understand the Commission's decision, the 23922 level was intended to put the Indiana shippers on the [fol. 2508] same basis into Illinois as the Illinois shippers (2745), and that was what the carriers contended for and the complainants contended for. The Illinois level was the level which the Interstate Commerce Commission had prescribed by requiring increases in the intrastate rates. I mean in certain of the intrastate rates. There was no issue as to others in this connection.

The only ones they refused to disturb were Rockford, Freeport, and Dixon. They were in issue. There were some in issue that were increased, there were some in issue not disturbed, and there were some not in issue. It is right that my first statement did not take in those not in issue, which probably formed the greater part of the Illinois rates.

(2746) I participated in the hearing in Docket 23922 for the C. & E. I.

By Mr. Burgess:

It is correct that the 23130 130-mile scale is a reasonable maximum scale. I am familiar with the decision in that case. The Commission had something in their report to the effect that although they did not have the power in that case, that any rates above the scale for that distance should be reduced to that basis, but they did not follow it out, and furthermore, the 130-mile scale was subsequently modified. The Commission didn't have any power to reduce rates in that case.

In answer to the question whether Chicago affects the [fol. 2509] rates from Illinois coal mines to Chicago (2747), either by the intermediate application or because of some

feeling that the rates ought to be made some way or other with respect to a depressed basis to Chicago, I would say the Chicage rate does not affect all of that destination territory in the State of Illinois. It affects the Illinois territory as far west as the line of the Burlington through Galesburg and Abingdon. That is the westernmost route from the Southern Illinois mines to Chicago. It does not affect the rates to East St. Louis, to Davenport, or to Moline. In fixing the 23130 scale and certain point to point rates in that Illinois Thirteenth Section case, I suppose the Commission took into consideration a great many other decisions by the Commission involving interstate rates. I believe they were referred to in the decision of Commission. (2748) Of course I could not say what was in the minds of the Commission when they fixed those rates to such points as Champaign, Decatur. Of course it is apparent to me that they increased those rates, they increased those rates to Decatur 15 cents per ton, they increased the rate to Champaign, I think, 10 cents per ton. I am not positive about the amount. When they got through with it I could not say offhand how those rates compared with the 85 per cent of the Holmes & Hallowell scale, but I will say they are lower than 85 per cent of the Holmes & Hallowall scale. The carriers at no time in any of the cases I have ever been in involving that terri- [fol. 2510] tory out there have taken the position that the rates properly on a reasonable maximum basis should be 85 per cent of the Holmes & Hallowell scale, nor have they taken that position from any of the Illinois groups that I know of. It would increase the Chicago rate plenty if (2749) you did. In answer to the question whether I take that position with respect to Illinois points and to any other destinations in Illinois, as far as I know we never advocate any relationship to any field. The Holmes & Hallowell scale has undoubtedly been used for comparative purposes in cases before the Interstate Commerce Commission or before the Illinois Commission. The Ohio rates have been used in some cases in Illinois to illustrate the low measure of the Illinois rates. I have never put in any comparisons with the Ohio rates personally. I think it has been done (2750) in some of the cases where I appeared as a witness, and where I was present; I could not say how many.

The carriers as a whole, including ourselves (2751), have taken the position that the rates in Illinois could reasonably be made as high as the rates in Ohio and they would still be not in excess of maximum reasonable rates.

By Mr. Ballard:

As to whether I intended to testify that none of the rates prescribed in Docket 23130 were prescribed as maximum reasonable rates, I would say there were some cases decided on the same record, I think the Davenport case, Tri-Cities. I don't say they were prescribed as maximum reasonable rates, but they were not involved in the original (2752) Thirteenth Section case. In other words, that was [fol. 2511] a separate complaint brought by Indiana consumers at the Tri-Cities, attacking the level of their rates, and the Commission in deciding that case increased the fine coal rates and decreased the lump coal rates. Of course they had the power to increase or reduce rates in that case. I don't know that the Commission intended the rates fixed in that report as maximum reasonable rates to any point. I believe they did award reparation from some points on the Burlington to destinations on the Burlington in Iowa. It may be that they intended those as maximum reasonable rates, I don't know.

Q. You don't know that in order to award reparation on that ground they would have to be maximum reasonable rates?

Mr. Day: I object to that as a legal conclusion.

Examiner Trezise: As a matter of fact, I think the decision of the Commission shows the Commission found those rates on interstate traffic were unreasonable to the extent they exceeded a certain amount. Whatever that amount was, you can argue in your brief.

(Narrative continued:) (2753) I don't know of any other rates in that case besides the rates to the Tri-Cities, if rates to the Tri-Cities were fixed as maximum reasonable rates, which should be excepted from my statement that the Commission did not make maximum reasonable rates in that case. My construction as to Docket 23922 is the same and without qualification, that none of the rates [fol. 2512] made in that case were maximum reasonable rates.

By Mr. Gutheim:

The area of this Chicago market which I speak of as the greatest market in the world is known as the Chicago industrial district. I could not outline the boundaries of it right here. It will go over to Indiana Harbor, it will go over to Gary, Indiana, down to Griff—I would say generally following the line of the E. J. & E. It does not include as far north as Waukegan. (2754) Northward I would say it includes the switching limits, that is, south of Evanston. Eastward, I would say to Gary, Indiana; northward to just south of Evanston. I could not say how many miles that would be, I don't think it would be 40. In all of that area our Southern Illinois rate of $1.95 applies. It would include deliveries on the line of the railroad that brings the coal into the district, and deliveries on other lines throughout that Chicago territory, all switching charges being absorbed. I think the C. & E. I.'s mines are nearer Chicago than any of them. (2755) The line of the Burlington is approximately 100 miles longer than the C. & E. I. As between the Burlington and the Illinois Central, I could not say which is the most important carrier from the standpoint of tonnage handled from Southern Illinois to Chicago. I could not tell whether it is a fact that the Burlington, via its own line, handles about 40 to 50 per cent of the Southern Illinois tonnage to Chicago; I don't have any idea how much it is. It is very [fol. 2513] substantially more than the C. & E. I. handles.

By Mr. Herrold:

As to understanding that before the Interstate Commerce Commission prescribes intrastate rates higher than have been prescribed by the State Commission, the Interstate Commerce Commission must first find what is a reasonable interstate rate and then base its decision accordingly—I don't understand anything of the kind.

By Mr. Burgess:

(2756) In connection with references I made to the Chicago market, to the effect that there was coal moving in there from all the various all-rail districts and also lake cargo coal moving into Chicago, I don't know what the tonnage of the lake cargo coal moving into the Chicago

destination area has been recently, but I think it has been as high as five million tons. That is coal for metallurgical purposes. It is largely captive coal moving from the east into the iron and steel industry in the Chicago district. The Illinois coal does not compete with that character of coal for metallurgical purposes to any extent that I know of. The Indiana coal is in the same category as Illinois.

By Examiner Trezise:

I stated that that coal that was moving in there was largely captive coal from the eastern fields. (2757) I happen to know that is a fact, as far as the L. & N. coal is concerned. I don't know about the C. & O. and N. & W.

[fol. 2514] By Mr. Burgess:

I may qualify that and say that so far as I know in connection with the L. & N., that is a fact.

Redirect examination.

By Mr. Day:

(2757) I didn't say there wasn't any appreciable amount of Illinois captive coal going into Chicago.

I stated our railroad serves the Southern Illinois, Springfield and Danville districts in Illinois. None of our rates were directly involved in the Thirteenth Section proceedings from those districts for which the 23130 scale was prescribed, but we were forced to pull down our rates to the level of that scale because of changes made by other lines to comply with the (2758) order. Some of the points on our line were competitive—Decatur, Illinois, for instance; we do not reach the point but we maintain rates there competitive with other lines for joint hauls. When other lines were required to reduce their rates into Decatur, we felt obligated to follow suit to keep our mines in the market.

No Big Four rate was primarily affected by the 23130 scale, although the Big Four originates a large tonnage in Illinois. A part of the Burlington line into Galesburg was affected from the Burlington mines in Fulton County, as I recall. I don't know how far it went up, whether it included Galesburg or not. I think it did.

(2759) The Central Fuel Corporation, formerly the South

[fol. 2515] Chicago Coal and Dock Company, are a large retailer of lake coal.

Recross-examination.

By Mr. Burgess:

I know the South Chicago Coal and Dock handled large quantities of coal off the L. & N. Railroad. That is as much as I know of, and I can't give you any amount. That was high volatile coal out of the Harlan coal fields. I could not tell you what they do with it. It is adaptable for a coking coal. That moves largely via Toledo. I could not tell you what volume this concern handles as concerns the lake cargo movement into Chicago.

(2760) I could not say whether there is any Connellsville coal moving into Chicago lake cargo. I presume there is coal from other Appalachian fields, in addition to that from the Harlan fields on the L. & N. I could not say. I don't know where the Inland Steel Company gets its coal from and whether they move it by lake. I don't know where the Youngstown Sheet & Tube Company move their coal from and whether they move it by lake.

(2761) I happen to know a majority of the coking coal used by the Illinois Steel Company, a subsidiary of the United States Steel, comes from the mine at Lynch, Kentucky, on the L. & N. They move it via lake to Chicago, and all-rail. They move a large part of it, at least, via lake during the season of lake navigation. I don't know whether they move it all that way or not.

I could not say how much coal is used by the large iron [fol. 2516] and steel plants in the Chicago district.

H. A. COCHRAN was recalled as a witness, and having been previously sworn, testified as follows:

Direct examination.

By Mr. Webber:

(2762) I have already testified in this proceeding. I have jurisdiction over coal traffic on the B. & O. on the entire system. I have never been in direct charge of the Indiana-

Illinois territory, but I have had supervisory jurisdiction in that area for about ten years. I have heard the testimony of Mr. Matthews and Mr. Washer.

The B. & O. serves mines in the fields from which rates prescribed in I. C. C. Docket 23922 apply, in a very small way. On the Brazil branch of our Indianapolis Division there are three small mines that have worked only intermittently in recent years. Only two of these put out any coal in 1932, and the combined shipments of these two were a little over 4,000 tons, and 154 tons of this went to Illinois destinations other than Chicago. In 1931 there were no shipments from B. & O. Mines in this district to these Illinois points. There is only one mine in Indiana on our St. Louis Division. It is a few miles east of Vincennes. Because of its location the output is largely taken for Baltimore & Ohio fuel. There is no mine on our road east of it [fol. 2517] for more than 250 miles and no mine west for nearly 100 miles.

This mine is in the Princeton rate group. The commercial (2763) shipments in 1932 amounted to a little over 180,000 tons, mostly to points in Indiana. Shipments to Illinois points were less than 30,000 tons. In 1931 shipments to Illinois points were less than 15,000 tons.

I agree with the testimony of Mr. Matthews and Mr. Washer that rates within Illinois and from Indiana to Illinois reflect the influence of the depressed rates from Southern Illinois to Chicago. In the past 25 years I have taken part in quite a number of coal rate cases in which the level of certain rates from mines in Ohio, Pennsylvania or Northern West Virginia was attacked. In practically all of them complainants used Illinois intrastate rates and rates to Illinois from Indiana in comparison with the rates we were defending. The general level of Illinois and Western Indiana coal rates is the lowest of which I have knowledge.

I don't recall the Interstate Commerce Commission ever used the Illinois or Indiana rates as a measure of rates from Ohio, Pennsylvania or West Virginia.

Cross-examination.

By Mr. Ballard:

(2764) I mean from Ohio or from West Virginia or from Pennsylvania to any place. What I had in mind when I

said these comparisons had often been urged, was that [fol. 2518] beginning with some of the earliest cases before the Ohio Commission, which was organized in 1906, we had some intrastate complaints in Ohio. They brought in Illinois rates for comparison. Before I. & S. 774 there were a number of intrastate cases in Ohio in which the Illinois rates were used. Illinois rates were used in I. & S. 774, they were used in the Ohio-Michigan Coal Cases, they have been used in numerous cases since, including the one now before us.

By Mr. Webber:

(2765) As to whether in any of the instances I mentioned those were carrier-made rates that were under consideration, I had no jurisdiction over Illinois in those days. I think some of the ones used in cases up to 1910, 1911 and 1912 were probably voluntary carrier-made rates. Since that time I think they have been mainly Commission-made rates.

By Mr. Ballard:

(2766) I said I didn't know where Illinois intrastate rates or Indiana to Illinois rates had ever been used as a yard stick in prescribing rates from Ohio mines, from Pennsylvania mines, or from West Virginia mines to any place, interstate or intrastate, until this case, the Republic case before the Ohio Commission. As to stating that qualification at first, anyhow, I was referring particularly to the Interstate Commerce Commission. I was referring also to cases in which I had taken part. I did not take part in the Republic Steel Corporation case. I was excepting the case [fol. 2519] that is now a part of this case. (2767) Possibly I should qualify the original statement by this one exception: I know of no case where any Commission has used the Illinois-Indiana level of rates in prescribing rates from mines in Ohio, Pennsylvania, or West Virginia except in the Republic case.

As to the last case before the Republic case in which the Ohio Commission passed on these rates or rates in this same general territory involved here, I could not cite all cases, but back more than twenty years ago they prescribed a rate of 80 cents from the Hocking District to

Toledo. (2768) Even going back as far as that, I don't know of any intrastate cases involving Northeastern Ohio. The State and Interstate Commerce Commissions have prescribed a lot of rates, but not rates from No. 8 and Cambridge Districts to Northeastern Ohio. The first time those were challenged, as far as I know, on your recommendation, the Illinois yard stick was invoked and adopted by the Commission and used in fixing rates.

I heard Mr. Matthews' testimony with regard to rates in Illinois, Indiana and Ohio. Just stated the other way, I would agree with what he said. He said he didn't know any reason, I believe, why the Ohio rates should be higher than the Illinois rates if the Illinois rates were on the proper level. I don't believe the Illinois rates are on the proper level.

(2769) I heard Mr. Washer's statement that the scales [fol. 2520] fixed in 23922 and 23130 were not maximum reasonable scales. That represents my view. I have in mind the language of those reports when I make that statement, and as qualified in the latest modification which he read.

(2770) I agree With Mr. Washer's position, with the qualification: "Our findings for the future are primarily to more properly align these rates with the rates from competing mines rather than the fixing of maximum reasonable rates for the services rendered." It is not my position that the passage read means the element or reasonableness was ignored in the fixing of those rates, that it did not enter into that, but in finding these as maximum reasonable rates that was one of the influences.

By Mr. Burgess:

(2771) It is correct, as stated in my direct testimony, that complainant interests in various cases running back a good many years before the Interstate Commerce Commission and a few cases before the Ohio Commission which antedated the war, have referred to the Indiana-Illinois rate adjustment when they wanted interstate rates into Ohio reduced. I haven't taken any part in and am not familiar with the situation out in Illinois, where, when the carriers wanted to justify their rates or increase their rates in Illinois and Indiana they referred to the Ohio rates. It is my thought that the rates to Chicago on coal

are depressed rates. They are depressed by both rail competition and lake competition. There is steam coal going [fol. 2521] into Chicago by lake in competition with Indiana and Illinois coal. (2772) I know there is some movement of steam coal. I would say the greater part of it is special purpose coal, but not all of it by a long shot. In considering the lake steam coal moving into that market versus all-rail, you would have more than one-fiftieth; and the very fact that water competition did influence the Chicago level of rates has been recognized in I. & S. 774 and the Ohio-Michigan Coal Cases. That is what kept Chicago out of affected territory. It is a fact there is steam coal moving into Chicago, but I told you I didn't know the amount of lake coal versus all-rail coal that moves into Chicago for steam purposes. I wouldn't say it is very small. I didn't say small or large, I said some coal moving there. (2775) There is a lot of byproduct coking coal, or metallurgical coal, that moves on lake cargo rates into Chicago, eastern coal. That constitutes a large part of the lake cargo movement into Chicago in normal times. Those mills in Chicago that use that coal are competitive, for example, with points like Youngstown. I wouldn't say the movement of metallurgical coal into Chicago exceeds in normal periods the movement into Youngstown; I would have to check up on that.

By Mr. Herrold:

The movement of coal into Chicago by lake would not be responsible for the publication of depressed rates from mines in Illinois and Indiana to principal points in Illinois, to East St. Louis. I don't know about Davenport; I think not.

[fol. 2522] Testimony taken at Columbus, Ohio, February 14, 1933

R. M. Paisley was recalled, and having been previously sworn, testified as follows:

Direct examination:

(2774) The Witness: Last Thursday Mr. Bronson reserved the right to file an exhibit showing mileage from the

Ohio No. 8 district and the Pittsburgh district to Cleveland, Lorain and Huron from P. & W. V. Railway mines on the mileage formula prescribed by the Commission in Docket 23922 in its order of January 24, 1933. I have that exhibit prepared and I am now ready to offer it if I may.

Exam. Trezise: All right, it will be No. 399.

(Exhibit No. 399, Witness Paisley, received in evidence).

Exam. Trezise: Are there any questions?

The Witness: I would like to say that this exhibit, No. 399, names the distances from P. & W. V. mines in the Pittsburgh district, the distances from the Ohio No. 8 district on our line as shown in Exhibit No. 356, being the proper distances used under the Docket 23922 order of January 24, 1933. That distance is 113.5 miles over the short tariff route, and therefore hauls under 130 miles are involved. The hauls from the Pittsburgh district over 130 miles in every case (2775), the formula of mileage being [fol. 2523] used to compute the distances in Exhibit 399 being the basis of all carload interchanges without transfer of lading. The 113.5 miles is the distance via the short tariff route from our Ohio No. 8 mines to Cleveland, Ohio. This Exhibit 399 covers only the Pittsburgh district, because it was only necessary to refigure the Pittsburgh district on account of our haul being over 130 miles.

Cross-examination.

By Mr. Ballard:

Referring to page 1 of Exhibit 399, the last item, Rockdale, West, Va., Arnold Mine, distance to Cleveland shown as 123.3, it is my understanding of the new formula in 23922 as applied to such a distance that if the haul over the entire route is over 130 miles you use the lowest distance that you can figure via routes where there is carload interchange without transfer of lading. This is true of this mine. (2776) If the short tariff route distance was 130 miles, I would use that. It is correct you might have a case where the short tariff route distance was 131 miles and you would be thrown to the shortest possible distance, which, we will say, might be 120 miles, and that latter distance would govern from that mine, while from

the mine where the short tariff route was 130 miles, the 130 miles would govern?

This illustration of Rockdale, W. Va., and Arnold Mine is one of those cases. In other words, the short tariff [fol. 2524] route is over 130 miles and the mileage formula on the new 23922 basis provides 123.2 miles. That is Rockdale to Cleveland, on the first sheet. It is true to Lorain, too, because the distance shown there is over other than a tariff route, but to Huron, Ohio, the route shown is a tariff route. The route to Cleveland via Hopedale and the New York Central is not a tariff route. From Louise, West Va. (2777), the shortest tariff route is over 130 miles; that is also true from Penowa. I think I can shorten up your questions if you will permit me to by saying that the short tariff route from all mines on the P. & W. V. Railway in the Pittsburgh district to Cleveland, Ohio, is in all cases in excess of 130 miles. You can check that by referring to my Exhibit No. 344. These mines are the same as are shown in my other exhibit. They are responsive to the test prescribed in the last decision, active and potential shipping points, according to my understanding of that decision.

The following is a correct statement of what I have done: where the distance from an individual mine in the Pittsburgh district via the short tariff route was more than 130 miles I figured the distance via the shortest possible route and used the distance via the shortest possible route. That is correct with the exception that my distances are [fol. 2525] from the stations at which the mines are located rather than mines. (2778) That was the method of figuring distance. If the shortest tariff route distance from that particular mine was less than 130 miles I did not refigure for the reason that, as I understand the new order, where the distance is under 130 miles we use the short tariff route. I mean 130 or less. My distances were figured from the station and not from the mine. It is correct I said my origins here are the same as in my prior exhibit, and were selected in the same way. All of the mines shown in this Exhibit 399 are prepared to ship coal.

I do not wish to make a positive answer as to whether the use of this formula for the purpose of fixing point to

point rates would violate the long-and-short-haul clause, because I have not checked enough to know (2779), but it appears to me that there is a likelihood of Fourth Section Departures being created. Speaking of point to point rates, I think it would work out you might have two shipping points on the same line, the further distant of which would be thrown on to the shortest possible route station and the lesser distant of which would not, with the result that the further distant point would take the lower rate. That does not occur in the case of group rates, because you average the distances before applying a scale: I believe if [fol. 2526] you consider the group as a whole that you probably will not have Fourth Section departures. That is the origin group as a whole.

By Mr. Gutheim:

If the mines on the P. & W. V. in the Ohio No. 8 Districts were classified as active and potential, such as are these on Exhibit 399, there are four mines in our Ohio No. 8 district that could ship coal if they had orders. I don't believe (2780) I can answer offhand by referring to Mr. Kern's exhibit showing our P. & W. V. Pittsburgh district production month by month approximately what our No. 8 production would be in proportion to our Pittsburgh district production, but I can say that we had no production in our Ohio No. 8 district after May, 1932, until October of 1932, and during October, November and December the tonnage was not over 2,500 to 2,800 tons for any one of those three months.

By Mr. Bull:

In every case the shortest possible route is shown on Exhibit 399. In the case of Huron, as I mentioned a while ago in response to Mr. Orcutt's question, the tariff route is also the short route.

[fol. 2527] W. R. Triem was recalled and, having been previously sworn, testified as follows:

Direct examination.

By Mr. Orcutt:

(2780) I am the same Mr. Triem who testified in this case previously in the hearing here at Columbus. I heard

Mr. Durham's testimony at the former Columbus hearing and also at Washington. (2781) Since listening to that testimony I have made a study of the exhibits offered by Mr. Durham. A study under my direction has been made by an Accounting Committee. The specific faults developed by this study evident in the methods pursued in arriving at what purports to be the cost of handling coal on the W. & L. E. R. R. from Ohio No. 8 District to the various destinations named will be explained from an accounting standpoint by an expert accountant. From an operating standpoint this exhibit is open to severe criticism. I am now referring to Exhibit No. 146. The general method pursued is faulty, and there are inconsistencies in the statements themselves, as well as in the application of expenses to operations upon which this exhibit is based. The investigations of the Accounting Committee prove conclusively that no study had been made of the current movement of coal as might have been expected from the title of the exhibit, but that records of certain operations conducted [fol. 2528] over two years ago in 1930 and also in 1931 were selected for analysis. Assumptions (2782) were found to have been freely made in lieu of actual cost study and system averages were applied without regard to the fact that specific operations were being considered.

Mr. Martin: I desire to object to this sort of testimony. It seems to be so far largely conclusions. If Mr. Triem has specific assumptions to discuss which he wishes to say are improper I think that is pertinent evidence, but merely to characterize the exhibit in general terms as full of assumptions or as not corresponding to the title, and so on, it seems to me it is incompetent.

Exam. Trezise: You do not object, of course, to his telling what he thinks is the matter with the exhibit if he does it specifically rather than generally?

Mr. Martin: I have no objection to him doing it specifically because on that we can cross examine, but to characterize it in these particular general terms I think it is prejudicial to us, and I desire to object.

Exam. Trezise: The examiner is inclined to agree with your objection there, provided it is applicable to his testimony. I don't know that it is. How far is your witness going to go in generalities?

Mr. Orcutt: Not far, Mr. Examiner, and he is going to back up his generalities, as you refer to them, by concrete [fol. 2529] facts and point out wherein in the exhibits are the bases for his statements, and Mr. Martin will have the whole (2783) thing.

Exam. Trezise: With that statement he may go ahead.

The Witness: While the exhibit is entitled "Statements Showing Cost of Transporting Bituminous Coal in Carloads, from Mines Located upon the Lines of the Wheeling and Lake Erie Railway Company in the Ohio Number 8 Coal District, via the Wheeling and Lake Erie Railway to Cleveland, South Lorain (including Lorain), Huron, Canton, and Massillon, Ohio and via the Wheeling and Lake Erie Railway, and the Akron, Canton & Youngstown Railway to Akron, Ohio", it can be proven that no cost of handling coal is actually shown anywhere in the exhibit. The title definitely says "South Lorain", also "Akron", yet the annual reports of the W. & L. E. Ry., shows neither of these cities on lines of the W. & L. E. Railway and no reference is made anywhere to a cost study of the actual movement of coal via other lines to such cities.

Taking the statement page by page, no evidence of cost of transporting bituminous coal is found. Pages 1 to 6 inclusive are statements showing the total and average number of train miles, locomotive miles and gross ton miles for a representative number of trains in which coal, in addition to other freight was transported to Cleveland, [fol. 2530] Ohio, South Lorain, Huron, Canton, Massillon and Mogadore, destined to Akron, Ohio. The title of each of these pages indicates (2784) that:

1st. Representative number of trains were used.

2nd. Other freight was transported in these trains.

3rd. A calculation was made of "service units".

4th. These service units applied to a through train containing "approximately the same number of gross tons".

Note particularly the terms "representative", "calculation", "approximately the same", yet the so-called "cost" of transporting bituminous coal is based on these statements. Specially each of these pages show erroneous conclusions reached by certain calculations which follow an erroneous method. Those are specifically stated.

We must take issue with the method pursued in obtaining the average number of gross tons per through train on each of pages 1 to 6, inclusive. There is no method that we have found to be satisfactory in determining the average tonnage of trains, except the one generally accepted and prescribed by the Interstate Commerce Commission, namely, to find out the number of gross ton miles involved and divide by the number of train miles. Had this method been used on the sheets 1 to 6 mentioned, the gross tons per train would have been considerably less than those shown. For [fol. 2531] instance, dividing the gross ton miles by the loaded (2785) train miles for the movements between Pine Valley and Cleveland, the average gross tons per train is 3,180 instead of 3,661. Dividing the gross ton miles by the total and light train miles the average gross tons per train is 2,985. It will, therefore, follow that the average number of loaded cars per train will be about 42 instead of 48, shown on line "E", and of course the net tons per train will be reduced and the average gross tons handled by a train of 42 cars will be considerably less than that shown on line "H". The car miles on line "J" will be considerably reduced, as will be the results of the computation shown on line "K".

The return of empty cars in road service, shown in line "L", while admitted to be a genuine attempt to reveal the cost of handling empty cars, is so at variance with the actual conditions that it cannot be accepted. It is my personal opinion that the greatest single problem of any transportation organization is the movement of empty cars and the balacing of power and crews. Anybody can move loaded cars, but it requires the most careful and experienced supervision to obtain economical distribution of empty cars and at the same time keep the light movement of engines and crews to a minimum.

[fol. 2532] In the case of the Wheeling & Lake Erie Railway this must be particularly true by reason of the size for the limited (2786) number of engines and cars gives little opportunity to effect economies through mass operations and distribution of empty cars as is possible on larger railroads. I cannot believe that empty cars from Cleveland, Lorain, Huron, Akron, Massillon and Canton are, or can be, moved with such regularity and dispatch as to make it possible to fit a theory such as is proposed in line "L",

sheet 1, applicable for the purpose of determining cost. As is customarily the case, empties will be moved from the unloading point for any one of a number of reasons and it is entirely possible that none of the reasons will be involved with economy. There may be too many empties at unloading points and no demand at the loading points. Immediately the mythical 100-car train goes glimmering, for relief must be afforded the originating terminal even though it involves the moving of two or three trains part way down the road for temporary storage. A few days later the loading district requires an abnormal amount of cars. Nothing is left to do but dispatch crews to the temporary storage points and pull the empties. During this same period coal trains, mixed trains, local trains, all may be called upon to move an abnormal amount of traffic into a given terminal, and if the conditions obtain for longer [fol. 2533] than 48 hours there will be a succession of light engines and cabin cars with crews being rushed back to the loading point as quickly as it is possible (2787) to move them. I mean these statements as referring to a hypothetical situation. No provision is made in these statements to meet conditions just described although these conditions must be dealt with in ordinary railroad operation.

This hypothetical empty train (described in line "L", page 1), which stops 67 miles from Cleveland, or 71 miles short of Pine Valley, has an engine on it which seemingly is dropped from consideration quite unceremoniously. We object to the failure of the statement to include the full mileage of this engine. We also must insist that since approximately 25 per cent of the traffic on the W. & L. E. Railway is unbalanced, that some account must be made of the return of power light to the coal fields. Surely for every 48-car train, or as I figure it 42-car train, there must be an engine and crew returned to Pine Valley. The 100 car empty train making 138 as a minimum locomotive and train miles, there would still remain 2 3/7 engines and crews to return to Pine Valley involving at least 312 locomotive miles, not to mention the cabin cars.

[fol. 2534] On page 7, attention is drawn to heading "Distribution of Total Freight Operating Expenses." On this sheet is (2788) shown the distribution of $18,346,105, or all of the freight operating expenses, except "Traffic, General & Transportation for Investment." The analysis of these

various items will be given in detail by the accountant witness. However, the absence of direct charges of expenses to the handling of bituminous coal is self-evident. When it is considered that the bulk of these accounts are the residues after passenger expenses, direct or opportioned, have been removed, it will begin to appear that actual cost is most decidedly not involved. Further, it must be noted that out of $18,346,105, the huge sum of $2,190,043 comprising so called "All other accounts" was divided on a percentage basis without regard to source of the charges, the labor performed or materials used; the item of actual cost must completely disappear and its substitute "estimated cost" take its place.

Page 8 is entitled "Freight Car Expenses." After noting —"Note A" (which quotes I. C. C. Finance Docket 1606) contains the phrase "basis of apportionment"; little more need be added as to the relationship of total freight car expenses to actual cost of transporting bituminous coal. Again I must insist apportionment of expense is not cost.

[fol. 2535] On pages 9 and 10 attention is drawn to the phrases "Computation of freight operating unit costs," "Application to service units required" and to the heading over columns 6 to 11 inclusive "Units and Operating Expenses Assignable to (2789) Haul to"—and yet at the bottom of page 9, Line "L," are the words "Average cost per ton—Freight Expenses" and line "N," "Total Cost per Ton." We have shown that actual cost has not been used, as applied to transporting coal, in any of the foregoing statements upon which pages 9 and 10 are based, hence the use of word "cost' in lines "L" and "N" is quite misleading.

On page 11 "Average amount per Net Ton of Switching Charges" are said to be shown, yet no reference is made to cost.

On page 12, Line 4, the words "Transportation Cost" indicate definitely that this series of statements which we have shown to be merely a rough estimate has been used to produce figures which are claimed to be transportation costs and these in turn combined with revenue figures to produce a definite operating ratio from bituminous coal moved to the destinations shown.

From the analysis I have briefly outlined in the foregoing I am convinced that the cost of transporting coal from Ohio No. 8 District to the various destinations mentioned, has not [fol. 2536] been determined by this series of statements pre-

sented as Exhibit No. 146. This analysis proves further that the separation of expenses already incurred as between passenger and freight, road and yard, locomotives and cars, coal and other traffic, system and specific territories (2790), is impossible and that only a rough apportionment of charges already made can be distributed to the handling of a particular kind of traffic. It is no exaggeration to say that practically no expenses are allocated directly to the transporting of coal. All of the items on page 7 for instance, especially Coal and Ore Wharves, Steam Locomotive Repairs, Depreciation of Freight Cars, Train Enginemen and Trainmen, are apportioned in some manner before appearing finally in the rough division of expense shown on this sheet. It is, therefore, obvious that actual cost is impossible of attainment and that the estimated cost is only a reflection of the good or bad judgment of men preparing a statement such as this Exhibit No. 146.

I am finished.

Mr. Martin: I was going to make this suggestion, that prior to deciding about the cross examination on the cost study, I should like to hear the direct testimony of the other witnesses who are going to testify about it, and then perhaps cross examine them all at one time or waive cross ex- [fol. 2537] amination and ask for the privilege of putting on such sur-rebuttal as may seem advisable. Could that privilege be accorded me?

Exam. Trezise: Do you have other witnesses to testify as to this cost study?

(2791) Mr. Orcutt: We have an accountant to follow Mr. Triem.

Exam. Trezise: All right, we will grant that and listen to the accountant.

Mr. Orcutt: I will call Mr. Saur.

(2792) E. F. Saur was called as a witness, and having been duly sworn, testified as follows:

Direct exaimnation.

By Mr. Orcutt:

I am E. F. Saur, Special Agent, Pennsylvania Railroad. I have been employed by the Pennsylvania Railroad 45 years.

During the first 28 years I worked in different positions, Maintenance of Way Department, Maintenance of Equipment and Transportation Department, among the positions being yard master and agent, supervising agent, and for the last 16 years my work has been in connection with making studies and preparing exhibits and testifying in connection with the defense of attacks on freight rates.

[fol. 2538] In my operating experience I have been a yard clerk, yard master, freight agent, I have occupied all of the different positions in the superintendent's office, have had charge of a freight claim department for five and a half years. I have put in about three years settling fire and stock and (2793) personal injury claims. I was a special agent for a newly created department of safety for eight months.

I am one of the co-authors of the Saur-Coverston Formula for determining terminal costs.

I was Chairman of the Cost Study Committee to determine the costs of terminal switching within the Chicago district in the recent case before the Commission. I would not call it a joint committee. There were fifteen railroads applied the formula and we had three hearings. At the third hearing the Chairman of the Interstate Commerce Commission asked the Switching Committee to work with representatives employed by some of the shippers in an effort to iron out a large number of minor differences. The Illinois Commission was represented on that committee, as was also the Indiana Commission. We held twenty joint conferences, sat down and discussed across the table the differences, and where we could not agree each side stated their position definitely and the entire result of those twenty joint conferences was embodied in an exhibit of 190 pages, known as Exhibit 83.

[fol. 2539] I have examined Mr. Durham's Exhibit 146 (2794) in these proceedings. I heard Mr. Durham's testimony here at Columbus, but I was not able to attend the hearing at Washington. I have seen the transcript of his testimony taken at Washington. Since hearing his testimony and reading the transcript I have made a study of Exhibit 146.

As a preliminary to appraising the merit or demerit of a so-called "cost study" as applied to a particular traffic such as coal, the first thing that would naturally be investigated

would be the operating ratio of the W. & L. E. Railroad, which was found to be 68.87 per cent in 1929, 73.22 per cent in 1930, and 79.67 per cent in 1931. From this it would appear to an accountant that the W. & L. E. system of operations were not on a very profitable basis.

From the Wheeling & Lake Erie annual reports for the years 1930 and 1931, it appears that total expenses charged to freight operations amounted to approximately 8 mills per (2795) net ton mile, that is the average system expense. Exhibit No. 146, however, shows estimated costs per net ton mile for handling the coal included in the study as follows:

Ohio No. 8	to Cleveland	5.1 mills
	to Lorain	4.8 "
	to Huron	4.8 "
	to Canton	6.9 "
[fol. 2540]	to Massillon	7.2 "
	to Akron	6.7 "

Such a wide discrepancy in the estimated expenses per net ton mile from the actual total system expenses indicates that the statistical analysis offered as Exhibit 146 cannot reflect all of the costs involved in handling the coal traffic under discussion. Such a conclusion is further suggested by the fact that of the total tonnage of all traffic originating in the W. & L. E. in the years 1930 and 1931, 43 per cent was bituminous coal.

On page 7, Item A, is encountered in track maintenance a method of apportioning costs that seems to us objectionable throughout the entire analysis. Total expenses are combined by Mr. Durham with total units to develop system averages and these are then applied generally to specific operations, which operations are not in themselves spread over the system. That this is a fundamental objection to so-called "cost studies" has frequently been held by the (2796) Commission. Arbitrary adjustments of these system costs, no matter how honestly made, can add but little value to the use of such average figures. For instance, Track Maintenance, Items A-1 and 2—this expense is proportioned to gross ton miles with no recognition of unusual expenses that might have inflated the total figure, although such expenses occurred in districts [fol. 2541] affected by this analysis. At the same time no

recognition is made of those districts where the heavy volume of traffic, character of traffic, character of locomotives and cars, etc., would seem to require a greater expense per mile of track than in other locations where the contrary of such conditions exist. It is also pointed out that expenses during 1930 and 1931 were drastically reduced compared to normal years on account of the general depression, and such expenses therefore cannot be typical of the expenses during a normal period. While it is generally felt that length of life of ties and rail must be considered in determining the number of years over which an average should be obtained, and therefore it is certainly reasonable to weigh estimated costs by averages of not less than five years. A rough estimate was made of Accounts 202 to 226 of a five-year period, 1927 to 1931, inclusive, and the average track maintenance per thousand gross ton miles was 6 cents higher than that prevailing in the two-year period covered by this study.

(2797) The division of track maintenance as between passenger and freight on the W. & L. E. is, we understand, in proportion to coal issued to freight and passenger engines, respectively. It is of interest to point out here that the I. C. C. instructions provide for a division of this expense by coal issues whereas this study divides the result-[fol. 2542] ant freight expenses on a gross ton mile basis.

While not taking issue with the I. C. C. instructions as to the divisions of track maintenance between passenger and freight, it is general knowledge that the coal issues are usually made upon the roughest kind of an estimate that the judgment of a coal dock laborer may dictate.

By Mr. Martin:

Do you know that to be true on the Wheeling & Lake Erie Railway? I object to the statement unless he has some knowledge that some coal dock laborer determines the real issues on the Wheeling & Lake Erie. It may be true of other railroads, but it is not true of ours.

Exam. Trezise: I don't think he said it was true of yours. You can cross examine him on that, of course.

The Witness: Account 231, Water Stations, Item A-4, amounting to $20,427.00, has been divided between road locomotive expenses and yard expenses on the basis of the

amounts of water used by road and yard locomotives instead of on the fuel issues basis as prescribed by accounting (2798) instructions of the I. C. C.

As illustrative of the method pursued in developing cost figures is Account—Telegraph and Telephone Lines, Item A-7, where a percentage is fixed merely as an estimate by the foreman of telephone and telegraph lines. We have no way of knowing if this is a reasonable amount properly [fol. 2543] apportioned to dispatching, having to depend upon the estimator's sense of justice.

Item A-8, All Other, includes all maintenance of way expenses except the maintenance of shops and engine houses and those other accounts specifically named under Item A. This large amount, namely, $645,705.00 is spread over road maintenance, dispatching, fuel and water, station expenses, yard expenses and special expenses apparently without rhyme or reason except that the total is divided between these items in proportion as those items bear to their total. It is interesting to note that among the accounts included in All Other is signals and interlockers, a proportion of which expenses finally is placed in Special Expenses for the sole reason that coal and ore wharves bear a certain percentage to the total, which percentage is then applied to the individual accounts carried under "All Other."

Account 278, Maintaining Joint Tracks, Yards and Other Facilities Debit, being facilities for the two-year period January 1 to December 31, 1931, separates the road, the (2799) facility, the location, the use, divided as between yard, road, road and yard, and names the amounts. I have separated these three groups, and even without taking into account the combination road and yard expenses which amount to $42,867, but only taking the amount shown as [fol. 2544] either road or yard, I find that of those two, 72 per cent is shown as road, while road maintenance in the exhibit shows 82 per cent of the total road and yard.

The Commission recognizes that there is a wide variation in type of locomotives handled and says in the instructions as to the division of accounts that an arbitrary adjustment should be made in Accounts 388 and 400, where there was a wide difference. Apparently this has received no consideration by the Wheeling & Lake Erie, and which has the effect of overcharging Account 388.

"Repairs to Steam Locomotives," Item B-6, includes all

expenses incident to repairs to all types of locomotives including 30 Mallet Compound Engines which are largely used in handling the trains of coal upon which this entire estimate is based. The division of expense as between the various operations described on Page 9 of this exhibit, indicates that some attention was given to the wide variation in costs of locomotive repairs as between different types of engines. Adjustments from 41 to 55 per cent are made on Page 9 and succeeding pages in an effort to compensate for (2800) the heavier and more complex types of engines, using a tractive power basis which, in our judgment, is of extremely doubtful value. The maintenance of Mallet Compound engines is much greater per unit of tractive effort than on simple engines of modern design. It is also [fol. 2545] worthy of note that while a compensation is proposed on the basis of tractive effort, as above described, in the final distribution of these expenses, the maintenance of shops and engine houses is not so divided.

Item B-8, "All Other," has the general fault of apportionment versus allocation previously touched upon under Item A-8. When it is considered that Accounts 235, 302, 308 and 314 are not specifically charged to the general division of expenses, included in the various columns on page 7, but are themselves apportioned as between passenger and freight, yard and road, engines and cars, it must be admitted that the accuracy of the total figure, for instance, $1,680,946.00 as representing locomotive expenses, is seriously in doubt.

Under Item C—"Transportation Expenses," Lines 2 and 3, "Station Employees," is found a total of $970,294, divided approximately 64 per cent to carload and 36 per cent l. c. l. Carload traffic on W. & L. E., according to the annual reports for 1930 and 1931, constitutes over 99 per cent of the total tonnage originated on that railroad. Irrespective of the method used to divide station expenses as between carload and l. c. l. (2801) It is obvious that 36 per cent of total freight station expenses to handle less than 1 per cent of the total business is grossly out of line. On pages 1014 and 1015 of the record of this case it [fol. 2546] noted that almost 75 per cent of wages of station employes was found by study of larger stations to be allocated to carload traffic; yet, when the final distribution of Account 373 is made, as described by Witness Durham,

it turns out that only 64 per cent is actually apportioned to carload traffic instead of 75 per cent.

The Division of Weighing and Inspection Bureaus, Item C-4 and Item C-5, which account totals $23,400, results in $5,765, or 25 per cent being charged to l. c. l. traffic, which traffic, as mentioned before, amounts to less than 1 per cent of all of the W. & L. E. traffic.

The charges to Account 394, Fuel for Train Locomotives, Item C-10, is evidently cost of fuel used and does not include the transportation of the fuel. In no part of this statistical analysis have we been able to find any reference to the effect on cost of operation of the W. & L. E. by the transportation of company materials. I understood Mr. Durham to say that no allowance was made for this cost in his study. It is also important to note that fuel for yard locomotives amounts to 28 per cent of total fuel charges on the W. & L. E., although yard locomotive miles from the annual reports are calculated as 43 per cent of the total of road and yard (2802) locomotive miles. This discrepancy appears serious even in view of the method that is generally used by coal dock laborers in distributing fuel.

[fol. 2547] I am not speaking of any coal dock laborers on the Wheeling & Lake Erie Railway.

The apportionment of $55,197 to yard expenses, Column 10 of Draw Bridge Operation, is questionable. These bridges are located at Cleveland and Toledo, and there is no reason why its cost of operation should not be allocated to the cost of operating the Cleveland and Toledo terminals, and not spread over all the yards of the W. & L. E. System. It is also interesting to note that these yard facilities as here apportioned carry with them a charge of $2471 in 1930 and 1931 against passenger operations.

All other transportation expenses, Item C-17, in the amount of $1,163,862, is spread over the various divisions of road, station, yard and special expenses as has been described under Items A-8 and B-8. Out of this total amount, for instance, is a charge to special expenses of $106,666, due in no small measure to the charge previously made of $350,347 that was apportioned to station employes l. c. l., and hence to special expenses. In the proportion that this $350,347 may be in error, so will the item of $106,666 be in

error, and of course should these items be too large, then all other items into which the original $1,163,862 was (2803) divided will be increased.

The amount in Column 1 table, Freight Operating Expenses, has been allocated to each group on basis of amount [fol. 2548] shown for each group from Items 1 to 16. The total amount is $20,170,712, which has been allocated to each group in Columns 1 to 13. This is incorrect as Accounts 404, 405, 407 and 415 to 418 are approximately all road. Accounts 412 and 413 are all road and should be so assigned. Note that Accounts 390 and 391 are assigned direct to yard. These accounts show Net Credit whereas Accounts 412 and 413 show a net debit. This results in reducing road costs.

The sum of Items A-8, B-8 and C-17, that is, all other expenses on sheet 7, is $2,190,043, or almost 11 per cent of the total freight operating expenses of the W. & L. E. Railroad. Any method of distribution of expenses that requires over 11 per cent of the system expenses to be apportioned upon an arbitrary percentage basis will certainly give results that are, to say the least, exceedingly questionable.

On page 8 is shown the distribution of car expenses and (2804) the development of constant and variable unit costs. This method in Note A is said to have the approval of the Interstate Commerce Commission.

It is also true that in Docket 19610, Chicago Switching Case, an entirely different method was used which also had the approval of the Interstate Commerce Commission. This latter method contemplates the use of the single unit of car [fol. 2549] day instead of the double barelled unit shown on page 8. In other words, the total number of freight train car days on the line for one year is determined and used as a divisor, and the amounts charged to Accounts 314, 315 and 316 for one year plus a proper proportion of M. of E. supervision plus a proper proportion of general expenses comprises the dividend and the quotient is a flat amount which is intended to represent the cost of having a freight train car on the railroad one day. Calculating the costs in this manner from the W. & L. E. Railroad produces a cost of 70 cents per car per day. This figure contemplates only serviceable car days, while within the last two or three years there has grown up an important factor in the shape of large quantities of stored cars, which item is shown in Columns 1, 2 and 3 of page 8, and a similar calculation excluding the stored

cars and based on the active cars on the line, as was done on this page, indicates an average cost per car day of 97 cents.

I have analyzed the annual reports of the Wheeling & Lake (2805) Erie with particular reference to Accounts 314, 315 and 316, and certain overhead, M. of E. and general expense accounts, and I think this record should show that in 1930 the charge to Account 314 was $1,580,604, while in 1931, the charge to the same account was $717,016, while the serviceable car days in 1930 were 3,444,792, and in 1931, [fol. 2550] 3,579,190. In other words, with substantially the same number of car days, the charge to Account 314 decreased approximately 50 per cent. Making a calculation for the year 1930 separate from 1931, under the basis just outlined, produces for the serviceable car days in 1930, 86 cents; in 1931, 55 cents or an average of the 70 cents previously mentioned, and on the active car day basis, $1.04 in 1930; 88 cents in 1931, or the average of 97 cents.

This latter method must produce more nearly representative cost figures than were developed on page 8, for the reason that if the $4,584,844 chargeable to car expenses is divided by the actual car miles from annual reports, namely, something over 105,000,000 miles, the result will be approximately $4.35 per 100 car miles. On page 9, Column 7, Line G, the total charge for car expense involved in 15 days per car for 48 cars and 13,524 car miles in train to Cleveland is $483.41 compared with 13,524 car miles at $4.35 per 100 miles, or $588.29. By the calculations on page 8, therefore, about $100.00 per train has been lost.

(2806) On Page 9 the following criticisms are offered:

Item A—Track Maintenance. In line with our criticism of accounting methods in the foregoing, as well as the operating testimony relating to the tonnage of freight trains [fol. 2551] upon Page 1, the item of $249.93 is questionable.

In like manner every criticism of items on Pages 7 and 8 will affect final expenses in Column 7. Under Items B-2, B-5 and B-6, the charges represent in the final analysis merely the sense of justice of the person preparing this exhibit. These percentages adjusted on account of constructive miles, size of locomotive, etc., can be just as well defended whether they are 105 per cent or 150 per cent.

The final disposition of charges under the heading of empty haul road service are too low in proportion as no attempt has been made to give any weight to the movement

of empty or light engines in the balancing of power. It is obvious that there must be some expenses involved in the movements of light power on account of the unbalanced traffic, west bound, which amounted to 23.71 per cent in 1930 and 25.02 per cent in 1921.

The total direct freight operating expenses in connection with the operation of a train to Cleveland is shown on Page 9, Line I, as $1862.48. Added to this is $185.32, which is obtained by applying 9.95 per cent to the total direct freight operating expenses in Column 1. The percentage (2807) named happens to be the proportion that "traffic and general transportation for investment expenses" bears to the total expenses. As far as we can see, this is the only rela-
[fol. 2552] tionship. This does not seem to be a reason for apportioning to trains handling coal less than 10 per cent of the "traffic and general transportation for investment expenses," particularly when it is remembered that 43 per cent of all traffic originated on W. & L. E. is bituminous coal. In my opinion, this bituminous coal traffic certainly justifies more than 10 per cent of the attention of the general and traffic organizations.

On pages 11 and 12 there appears a summary purporting to show ability of the W. & L. E. Railroad to make money with rates to destinations as shown. In my opinion, these pages are meaningless on account of the inclusion of average absorbed switching charges instead of actual costs of interchange and of final terminal delivery of traffic involved. In all of my experience this is the first time that rates were involved with reciprocal switching charges, and I do not think they can be so considered in this case.

When I say this is the first time I have encountered a study where rates were involved with the reciprocal switching charges in an attempt to show what they could make, I had reference to Mr. Durham and not this particular case (2808), because that same plan was followed in the Ex-River Coal Case, I considered it was the same general proposition. It is the first time I ever found a railroad trying to do that. Mr. Durham did it there.

[fol. 2553] Otto F. Wilkinson, was called as a witness, and having been duly sworn, testified as follows:

Direct examination.

By Mr. McVann:

(2809) My name is Otto F. Wilkinson. I live in Cleveland, Ohio, and am manager of the Coal Division, City Ice & Fuel Company, at Cleveland. (2810) That company is engaged in the retail coal business, and I have been engaged in the retail coal business in Cleveland about nine years.

I am a member of the organization of retail coal merchants in Cleveland. That is a branch of the Cleveland Chamber of Commerce, or rather a division of the Cleveland Chamber of Commerce, and the Retail Coal Dealers' Board is the exact title of it, and its membership consists of the great majority of dependable leading coal retailers of the city. I happen to be president of that organization at this time. My testimony is offered generally for the members of that association.

I have examined some of the testimony in this proceeding about retail prices and conditions in Cleveland. (2811) That testimony does not correctly show the facts as to the Cleveland retail situation. Retailers in Cleveland have been very careful over a period of years to see that the different coals that came into the city have equal rights to flow to the consuming public. In other words, we have [fol. 2554] attempted to treat anthracite fair by not adding an excessive margin on anthracite. Coke, we have attempted to give the coke consumers an equal chance by adding a proportionate amount of margin on the coke, and the same way through the high volatile and low volatile coals.

My purpose in coming here to testify is that it seemed to us that the evidence presented concerning the retail situation in Cleveland was not quite clear, and it was merely to supply that correct description of the retail situation in Cleveland for the Commission's consideration.

During the period that the United States Fuel Administration controlled the coal business of the country, there was a gross margin of $3.00 per ton reached by it at Cleveland. That gross margin covers (2812) all of the expenses connected with the business, the delivery and all of the items in conducting a retail business. In addition, that takes care of the loss in value due to breakage or degrada-

tion of coal in transit and in handling, it takes care of the weight shortage on cars, which at times is considerable, and it takes care of course of all of our lost accounts and everything connected with the conduct of the business. Of course the terms "gross margin" and "profit" are not synonymous, but I would say it does have relationship because if the gross margin is wide enough our chances of [fol. 2555] profit are considerably better, and it must come out of the gross margin, after all these other items I mentioned are taken care of.

The gross margin of $3.00 was adhered to generally until July 1, 1932. When I say $3.00, at any particular time (2813) the gross margin might have been somewhat above $3.00 or somewhat below, because the retail price cannot fluctuate as rapidly as the mine prices. When that $3.00 margin prevailed the group of dealers that belonged to this organization was doing their business on a credit basis, probably an average of 85 per cent of the coal they sold was delivered to the homes during the summer and fall when it was called for, and the consumer paid for it whenever he had the money, which scattered over some time until the next summer, with a large percentage of them. We made a survey the first of June, and during June, and found that, due to the depression, there was an appalling number of consumers that had not paid anything on their bills and were not likely to pay, and it looked like a poor business policy to put several hundred thousand dollars' worth of coal on the books again with a small chance of collecting. So in order to induce them to pay cash for the coal as it was received, we offered a discount of $1.00 per ton if they would buy the coal and pay cash for it on delivery, and that has prevailed since the first of July, 1932. Prior to this we were doing about 85 to 90 per cent (2814) [fol. 2556] charge business, credit business. Since the new rule has been applied we are doing from 80 to 90 per cent cash business.

Coming to the question of smokeless or low volatile coals that carry a rate of $2.64 to Cleveland, we buy f. o. b. mines and pay on the invoice rendered, of course, on the railroad weights, the railroad weight being taken near the point of shipment. With standard prepared sizes of smokeless coal, such as Pocahontas lump or egg, there is a degradation

caused by the transportation of that coal from the mines to Cleveland. That will vary from different mines, but the No. 3 coal that we are using generally will run about 25 per cent in breakage between the time it is loaded and the time we are ready to deliver it. We buy and pay for, say a 50-ton car of egg or lump, and when it is unloaded into our yard it has become roughly 37½ tons of egg or lump and 12½ tons of slack. (2815) When we have sold this coal to the consumers, taking this 50-ton unit, approximately 10 per cent of slack is left in our yard. We would have roughly five tons of fine coal left in our yards. The prevailing price today at Cleveland for this Pocahontas lump and egg coal is $6.75 per ton. We sell the remaining slack coal to apartment houses, laundries and other places using steam size coals. That coal is being sold in Cleveland now at $3.85 a ton to $4.25 per ton.

[fol. 2557] Cleveland retailers stock and carry high volatile as well as low volatile coals. We now handle West Virginia or eastern Kentucky high volatile coals which pay a rate of $2.39 to Cleveland.

(2816) In October, 1932, there was an increase of 18 per cent of smokeless coal sold over October, 1931. In November, 1932, there was an increase of 72.2 per cent of smokeless coal sold over the tonnage for November, 1931. In December, there was an increase of 63 per cent of smokeless coal over the tonnage for December, 1931. That is by all of the members that report their tonnages. All of the members of the association do not report their tonnages. I have figures including all high volatile coal. In 1932, the high volatile lump coal increased 134.8 per cent, in October over the tonnage delivered for October, 1931. (2617) That was high volatile lump coal. In November, 1932, there was an increase of 131.4 per cent of high volatile lump over that delivered in 1931. In December, 1932, there was an increase of 225.5 per cent of high volatile lump over the amount delivered in December, 1931.

These figures from which I am reading are reported only as the total high volatile lump and do not segregate as to the territories from which they originated.

(2818) I have figures that show the percentage from each territory of the total amount that the City Ice & Fuel [fol. 2558] Company sold during the month of December, 1931, and also for 1932. In December, 1931, 31½ per cent

of the coal we sold was smokeless coal. In December, 1932, 19.7 per cent of the coal we sold was smokeless coal. In December, 1931, 12.5 per cent of the coal we sold originated in the southern high volatile fields; 4.5 per cent originated in the southern high volatile fields in 1932, for the month of December, 1932. In December, 1931, 43.5 per cent of the coal we sold originated in the Fairmount and Pittsburgh fields. In December, 1932, 15 per cent of the coal we sold originated in the Fairmont and Pittsburgh fields. In 1931, December, 12.5 per cent of the coal we sold originated in Ohio. In December, 1932, 60.8 per cent of the coal we sold originated in Ohio.

From my conversation with other dealers in the city, other typical dealers in the city, I am of the opinion that their figures would correspond approximately with ours. (2819) I believe the average temperatures that prevailed during the months I used in giving figures would throw some light upon them. I have these temperatures and they were obtained from the Weather Bureau of the United States Government at Cleveland. In October, 1931, the average temperature was 59 degrees. In 1932, it was 55 degrees. In November, 1931, the average temperature was 51 degrees, and in 1932, it was 40 degrees. In December, [fol. 2559] 1931 it was 40 degrees, and in December, 1932, it was 34 degrees.

You will note that in November, 1931, and November, 1932, there was a difference in temperature of 11 degrees, and in (2820) December, 1931, and December, 1932, there was only a difference of 6 degrees, and yet there is a greater increase in the coal sold in December than there was with a larger degree difference in the month of November, and that is explained because after you get temperatures so low, down to 40 degrees or below, one degree difference calls for a great deal more heat than temperatures, we will say, varying from 59 to 55 degrees. That is the significance attributed to them by the retail coal dealers, generally, in dealing with this question of temperatures.

Referring to the testimony in Washington of Mr. Sprague, of the Hanna Coal Company, as to a certain retail selling price and corresponding mine price, and matching them up after the freight cost to indicate the gross margin that would be available to the retail merchant, as a retailer of practical experience, I do not regard this as a safe

method of arriving at the true margin. You take the cost price at the mine at any one day and compare that with any retail price in any retail market, and you do not get a true picture of what margin is left for the retailer. That is because if there is anything (2821) that slows up the movement of coal from the mines there is a tendency on the part of the operator to reduce their price to encourage the [fol. 2560] movement of the coal. The retailer is probably already well stocked with coal at the higher prices and because he cannot fluctuate his prices as rapidly as the wholesaler there will always be a lag in the retail change lower than the change in the wholesale prices. It works on the down market the same as on an advancing market, so that if any time you will check the figures or the prices at retail with the prices at which the coal can be purchased at the mines, you are likely to get a very erroneous opinion as to what margin the retailers are working on.

Regarding the testimony of Mr. Sprague that the average householder purchased about 10 tons of coal per annum, and that 29 cents per ton difference in the rate would only mean $2.90, and that this was not an appreciable or important amount on a winter's coal bill, I would say that the purchaser of coal very seldom inquires into what the freight rate is unless you happen to be selling some one who is engaged in the coal business. The consumer knows nothing about where the coal comes from, how much it costs at the mine, nor anything about the freight rate. The retail merchant pays the entire (2822) freight, whatever it may be, and also stands the degradation and weight shortage.

The weight shortage means the difference in the weight [fol. 2561] arrived at at the railroad track scale at the point of origin, upon which basis we pay for the coal, and the amount of coal that is delivered out of the car at our yard. It may amount to a small amount or a large amount, according to the circumstances of the particular case. Coal is shipped in open cars and is therefore subject to stealage and all that sort of thing. We can have a car re-weighed without expense, provided the shortage exceeds a certain minimum tolerance, which the railroads require. If the shortage does not exceed that minimum, then the company ordering the re-weigh pays the re-weigh charges. And we are confronted, then, with the choice of being (2823) able to collect from the railroad for the lost coal or absorbing

the loss caused by the shortage. That is what I mean when I speak of weight shortage in connection with shipments. At one time our company set aside a reserve or a charge of 2 per cent on all the coal we received to make allowance for this shortage. In other words, we added 2 per cent to the cost of the coal, plus the freight, to determine what the coal actually cost us in our yards, the 2 per cent making up for the shortage. Later we changed that system and now take the shortage at the end of each month by actual inventory. That enables us to arrive at a closer approximation of the actual loss than the old 2 per cent method.

[fol. 2562] Regarding the testimony of Mr. Richards at the Washington hearing that at the present time, on account of the great shrinkage in incomes, the large amount of unemployment, etc., the average buyer of any necessity of life sought to buy that (2824) which sold at the lowest price, and that the quality basis has been abandoned, I would say that is true to a large extent in Cleveland with the consumer of coal. In other words, the consumers have made considerable change from the high priced coal to the medium priced coal, but we find that they have not gone ton any great extent to the very cheap coal. In the city of Cleveland we have the menace of truck coal coming from the nearby fields, and a good many dealers, in order to forestall that menace, started to merchandise the cheapest coal they could buy at very low prices. To be exact, it was $3.95 per ton. We find that there has not been a great tonnage of that priced coal moving, because it is not well adapted to home use, but they have gone to a considerable extent to the coals next in price and next in quality. Those coals are largely the Ohio high volatile coals.

There is nothing else I desire to add with regard to the retail coal business.

Cross-examination.

By Mr. Ballard:

(2825) This $3.95 coal originates in one of two regions generally. It varies from inch to inch and a half coal and [fol. 2563] it is coming largely from the Ohio No. 8 field or the Middle district fields. That was not by truck. The next higher price and quality coal, some of it is coming from the Ohio No. 8 fields, but it is more costly at the mine,

and it is four or five inch coal instead of one and a quarter inch. Some of it is coming from the Hocking field and some of it is coming from the Pittsburgh & West Virginia Railroad field (2826), in Pennsylvania. That is the group of coal that is selling at $4.75 to $5.25. I would be afraid to risk an estimate as to how that is divided, in approximate percentages, among those three origin districts. I have no figures covering that. I separated my Ohio coal from my Fairmont and Pittsburgh coal in December, 1932, statistically. (2827) I stated the retailers had been unable to sell a great deal of this very cheap Ohio No. 8 coal at $3.95.

Referring back to my original statement, I would say so far as the City Ice & Fuel Company is concerned, not talking now about the other dealers at all, 15 per cent of our sales in 1932 originated in the Fairmont and Pittsburgh field. I mean December, 1932. That is all grades of coal. And in 1932, 60.8 per cent of our total sales of all grades originated in Ohio. I haven't any basis on which to make [fol. 2564] an estimate as to how this medium grade (2828) domestic coal which came from Hocking, No. 8 and P. & W. V. mines was separated. I am, of course, familiar with what is being offered, but I could not tell you how much of each grade is being sold.

As to the trade names of the Ohio No. 8 coal, that is being sold at $4.75 to $5.25, so far as the retailers are concerned, the majority of them have their own trade names. It varies all the way from Kitchen Lump to Special Lump and Ideal Lump, and a great variety of names. Some of those trade names cover No. 8 coal, and are bringing the prices I stated. Some of it is Hocking coal and some of it is P. & W. V. Pittsburgh coal. The retail price of smokeless coal of (2829) the same size at the same time as these prices just gave, would be $6.75. I am quoting our own prices. There are different prices offered on smokeless coal for different kinds of smokeless coal. In the market they range from $5.75 to $7.00. That is four inch lump smokeless coal. We don't sell a great deal of southern high volatile coal, 4 inch lump. We carry it and have it for sale on request. Four per cent of our December, 1932 business was southern high volatile, which means all sizes. The current price on 4 inch lump is $6.00, with City Ice & Fuel. I don't believe I could give the range generally because that (2830) grade of coal is usually concealed in Cleveland by trade

names. It is not sold as southern high volatile lump, but [fol. 2565] is sold as special trade coals, but it is in fact southern high volatile lump coal. And it is of a quality that permits it to be described by some fancy name and has been sold as special coal, and I gave the price of $6.00 for that a while ago. We are also offering Kentucky—that was West Virginia high volatile—we are also offering a Kentucky high volatile coal at $6.25. Those are both premium coals, low in ash and very special coals, and are both included within that 4 per cent. That is the kind of fancy goods the public is not so much interested in, now that price has become the prevailing consideration.

(2831) In computing retail margins, I regard it as inaccurate to take the mine price today and the retail price today and subtract one from the other and call that a retail margin. I would say that before you could determine what the margin is you would have to cover a wide enough time to allow for the advance and the decline. For example, in September and October of this year and the early part of November, Pocahontas coal was selling at the mines generally for $2.50 a ton. That is lump coal. Some were getting $2.75 on the egg coal. The retailers of Cleveland were fearful we were going to have a shortage of Pocahontas coal because of lack of market for the slack, and we had been coached all summer that we could look out for a shortage [fol. 2566] because the steel mills were not going to use the slack. As a result, the well financed retail companies of Cleveland laid in a very heavy stock of coal in September, October and early November at these higher prices. A large percentage of that was not disposed of until about the first of the year or shortly after the first of the year, and as a result the margin that you would arrive at by taking the mine price and the retail price would be far (2832) from the facts. I mean on any particular day. You would have to take the swing over the period, but I would say a year would be a sufficiently long period. I don't think it possible to figure a retail margin in Cleveland since August 1, when this rate change took effect. When we were paying $2.50 or $2.75 for smokeless coal, for example, the margin would appear to be inadequate, and then before that high priced coal was moved out it would appear to be excessive.

Generally the prices of coal are co-related. In other

words, the premium coals of the southern states will not move and continue to move if there is any other field breaking excessively low in their prices. That is equally true of Pocahontas—Pocahontas cannot continuously ride at excessively high prices if bituminous coal is being offered at excessively low prices—high volatile bituminous. (2833) So that the correlation between the prices would result in [fol. 2567] corresponding correlation between the margins. You could not safely rely on the margin on a particular day or during a particular short period as representing the absolute amount that the dealer had to use to make a profit out of it.

We don't have much weight tolerance, the railroad has it. We have to tolerate up to a certain weight on each car. As I understand it—and I am sure the railroad men here can correct me if I am wrong—if we order a car out for re-weighing because we believe it is short weight, and we find the shortage does not amount to an excess of 800 pounds—on some of the roads, I believe, it is a thousand, and some I believe it is 800—supposing it is under the limit (2834), then we can make a claim for that number of pounds, the cost of the coal, plus the freight rate. If we find the weight is 500 pounds short and the limit is 800 pounds we can make a claim for the 500 pound shortage and the freight on it, but we will have to pay varying prices, I believe from $6.40 up to as much as $10.00 for the service of having it re-weighed, which is greatly in excess of what we would collect for 500 pounds of coal. In other words, they make good their losses in weight and the freight charges on them scrupulously, and the tolerance only relates to whether we pay for the re-weighing. That is one of [fol. 2568] the expenses of the retail business, and one of the things that has to come out of the margin. (2835) That is the legitimate margin expense.

This very low grade No. 8 coal that the retailers are now selling for $3.95, may be as low as one inch coal. I might explain that our company is not offering any domestic coal at $3.95. Some retailers are. I wanted that clear, however, that our company is not offering a $3.95 coal. It is being offered (2836) quite generally in Cleveland at $3.95. The origin of that coal generally is from two sources; one is the Ohio No. 8 field and the other is from the Middle district field that comes into Cleveland on the $1.28 freight

rate. That coal is costing the Middle district field from $1.20 to as high as $1.30, depending on the amount the mines have for sale. The No. 8 is costing from 90 cents to as high as $1.00 a ton, and that comes in on the freight rate of $1.51. That includes a 6 cent surcharge. There is coal of similar size coming in from other districts. I don't know of any other coal coming from any other district to sell at $3.95 in that market for domestic purposes. (2837) Some coal at that price is coming from the Fairmont field. That sells at the mine at a price varying from 80 to 90 cents. So far as I know, that grade of coal coming into Cleveland is being used for apartment houses and not for domestic purposes, and because the delivery conditions for apartment [fol. 2569] houses are quite different from ton delivery to homes, the prices do not bear any relation. However, it is moving to apartment houses at about $4.15 a ton. The delivery requirements for apartment houses are much less onerous than to private bins. Apartment houses will take a 5 ton truck load and it is dumped into the bins. The home will take it in ton lots and it has to be shoveled through the window.

To my knowledge there is no coal of this size coming from other districts besides the Middle, Ohio No. 8 and Fairmont. (2838) I don't know of any coming from Pittsburgh, southern West Virginia, or eastern Kentucky; or in that size smokeless.

In sizes smaller than lump or egg, there is nut and slack coming from southern West Virginia and eastern Kentucky. As to smokeless coal, besides the 4 inch lump, the egg size stove size, and some nut size, are used for domestic purposes. Those are of varying sizes, depending on the mine. There is no standard. Lump size varies from 4 to 6 inch lumps. That is over a 4 inch screen. The next smaller size is egg size (2839), and that will vary from 2 x 4 egg to as high as 3 x 6 egg. The next size is stove size. In Cleveland market there is some coal sold domestic as mine run, some smokeless coal sold, and the common was of preparing that is to give 50 per cent fine coal and 50 per cent coarse coal over a fork. The 50 per cent coarse coal [fol. 2570] is forked in and the 50 per cent fine coal is shoveled in. That is just the lowest grade smokeless that is used for domestic purposes. The retail price of that is $6.00. Generally that is not bought from the mine, that is

made up at the yard from prepared coal and the fines. It is mixed of prepared and fine. (2840) It would not be fair to compare that figure with the f. o. b. price run of mine smokeless coal. At this particular time mine run that would not be quite as coarse as that would cost about $1.25, and the $2.70 freight would make $3.95. For domestic purposes, it is prepared half and half. That is, half over an inch and one-half fork, so that it is everything from inch and one-half up to the large lumps, and the other half is everything through the fork. That coal sold is insignificant, but to whatever extent it is sold, we save some of the degradation which we would incur if we sold it as slack.

(2841) I was speaking of Mr. Sprague's testimony when I said the testimony in this record as to the Cleveland retail situation is incorrect. I gained the impression that it was the practce of Cleveland retail dealers to add for retail purposes a smaller amount to the cost of Ohio coal than it was to add to coal, we will say, from the southern West Virginia or Pennsylvania fields, and that is not true.

[fol. 2571] (2843) I gained the impression from reading Mr. Sprague's testimony that he figured the retail margins on coal in Cleveland by taking the retail prices on a particular day or at a particular time and comparing those with the mine prices at the same time, plus the freight charges. I have explained that that is the wrong way to figure retail margin. (2844) That was the point I was especially concerned with, that it would look as though the practices in Cleveland in retail coal were favoring one territory versus other territories, and that happens to be not the case. It is the practice to apply the same margins, except on smokeless coal, from all districts, usually somewhat higher, from 10 to 20 cents higher to care for the [fol. 2572] excess degradation, and other coals substantially the same. On coke usually 25 cents extra because of the bulk to take care of the extra expense in trucking.

(2845) The 4 inch lump out of No. 8 field is varying from $1.00 to $1.40 a ton. The corresponding figure on smokeless 4 inch lump is $1.50 to $1.75. On the coal on which I gave the $6.00 retail price, the figure is $1.50. On the Kentucky coal that I gave the $4.25 price on, it is $1.75. There is southern high volatile 4 inch lump of what you might call ordinary grade, not premium. (2846) The mine price on that would be from $1.00 to $1.25. I don't know

the retail price in Cleveland, because I don't know who is handling that low grade West Virginia coal. I would not know whether any is being handled in Cleveland. This southern high volatile premium coal pays $2.39 to Cleveland, plus 6 cents surcharge.

The percentages I gave for October, November and December 1932 and 1931 was not smokeless lump, but high volatile lump, all smokeless sizes.

(2848) I gave two percentages. It is true the tonnage figures from which I computed the percentages I gave could readily be added together and then a percentage derived from that of the amount of each of that tonnage that was high volatile and the amount that was smokeless. [fol. 2573] The same thing could not be done distinguishing between southern high volatile and Ohio high volatile. The figures have been computed over a number of years from all the retailers reporting, and the blank that we are supplied designates only high volatile lump and smokeless, but does not classify the origin of the lump in the high volatile. (2849) That was the basis upon which the City Ice & Fuel data was prepared, the percentage that each field supplied in our total sales. The basis of comparison for the Association was the per cent of increase in the two classes. It is two separate bases of computing.

I am not sure of my computation, because this is figured under rather adverse conditions, but as I figure it here there would be 46 percent of the coal delivered in the three months October, November and December, 1932—46 per cent would be high volatile coal and 54 per cent would be smokeless. That is, as comparing these two grades of coal. I mean by that that we have only two classifications of the coal delivered by the retail dealers. That is this smokeless coal and the high volatile lump coal. As between those two grades, my figures, subject to correction here, would show that 46 percent of those two grades was high volatile lump and 54 percent smokeless (2850), all smokeless. I hope that will not be confused as being total tonnage delivered by the retailers. Taking December, the [fol. 2574] 46-54 separation would not be about the same. As the years have gone on, the swing to the high volatile has been greater, and as will be shown by that percentage I gave you to start with, which shows that the smokeless coal increased 63 percent in December, while the high vola-

tile lump coal increased 225.5 per cent. The December percentages corresponding to the three months' percentages would be 51½ per cent in December; that is high volatile and lump coal. All tonnages were included in my City Ice & Fuel Coal Company figures. (2851) I have not got the Association all-tonnage figures, not even the grand total.

By Mr. Martin:

We have noticed the truck menace in Cleveland more particularly since the first of the summer, about June 1st. We noted a very marked tendency to increase up until fall, and then when some of the dealers adopted the $3.95 price and corresponding low prices on steam coal, I believe in the city of Cleveland it was checked. It was in the fall that the reduced rates from Ohio No. 8, Middle and Massillon districts went into effect. This truck coal supplied types of businesses like garages, a few apartment houses, greenhouses, generally where there was opportunity to deliver load lots. (2852) In Cleveland I believe there has been very little as yet of the domestic delivery. However, I knew of one company that was being organized for the specific purpose of starting a fleet of trucks to transport coal from the nearby mines to Cleveland for [fol. 2575] general retail business. That process of organization was going on in the early summer, and it had not come to fruition prior to August 1. The particular project I have in mind was abandoned. I do not mean to say that even after the reduced rates there was not some coal trucked in there. There has still been coal trucked in, even since the reduced rates, in total tonnage a considerable amount. I cannot give you first hand information on what districts that coal comes from. I have gained the opinion from several sources that (2853) it was coming generally from what we know as the Canton district, or the middle district. I believe it is coming from both wagon mines and mines served by railroad. In either event the tonnage is being diverted from rail haul. The project I spoke about being abandoned was planned on a rather large scale trucking proposition.

By Mr. Orcutt:

There is some of the inch or inch and a half lump that

comes from the Ohio fields that is sold to apartment houses. The difference between the Ohio No. 8—4-inch lump and the 1½ inch lump, is that one goes over a 4-inch screen and the other goes over an inch and a half screen. (2854) In addition, this coal that is being offered at $3.95, much of it comes from mines that do not have coal in qualities equal to the coal that is being offered by other dealers over the 4-inch screen and at higher prices. That [fol. 2576] is not the 4 inch lump washed that I know of.

When that term "fancy name" was used, I had in mind names that all of us in the retail business, plus the consumers in Cleveland, have learned to regard as representing real value. We happen to offer a Millers Creek coal around 3 to 3½ percent ash and very high grade coal and we call it Ideal Lump—that is, the City Ice & Fuel Company, and that coal now, for the few who are still buying it, means a definite thing to them. That is Kentucky coal. (2855) When I said some Ohio No. 8 was sold under the name of "Ideal Lump" I believe I only used that as an illustration of the trade name. They have trade names of the coal from the Ohio No. 8 district. Those names are as fancy as the southern names. The prices aren't nearly as fancy, and the public generally have placed them relative to their value.

By Mr. Day:

Under the plan I referred to to move a considerable tonnage of coal into Cleveland by truck, that coal was generally to have been moved from the Middle district field, from around Canton.

By Mr. Ballard:

There is a price differentiation in favor of apartment house deliveries on this Ohio coal in 5-ton lots. (2856) If you are referring to companies selling coal at $3.95, I [fol. 2577] don't know what their prices are to apartment houses. Many of them, not all of them, but many of them are not in position to sell apartment houses because they haven't sufficient capital to carry the accounts. There are a few companies who are financed so that they can carry the apartment house accounts and I believe that the coal from those companies is moving to the apartment houses

at practically the same prices as it is being sold to the homes, because that price was established by the better dealers who used it merely to meet this danger from the truck situation.

By Mr. Herrold:

I have no information as to the prices to industrial concerns in Cleveland such as steel plants, blast furnaces, that receive coal in carload lots. I testified with respect to Pocahontas No. 3 coal that the degradation amounted to 25 percent: That was (2857) 12½ tons degradation on a car of lump, but we were able to dispose of some of that slack in the sale of the lump and that the remainder which was sold as slack was five tons. The point was this: We sell that coal at $6.75 containing a certain percentage of fine coal. When we sell lump at $6.75 it is what is known as shoveled lump. We screen it, add a certain percentage of fine coal to it. The percentage we sell is 20 per cent, or 400 pounds in a ton, but we actually add somewhat less [fol. 2578] than 400 pounds, so that when we get through we will have about five tons of fine coal in our yards that did not go out with the lump coal. The fine coal is then sold to apartment houses, laundries, and other places using steam coal. The selling price for that ranges from $3.85 to $4.25. That price is very acceptable because the price that can be realized depends on how much of that fine coal retailers in town have accumulated. If they have accumulated a great quantity, they have to dump it at any price to get it out of the yard.

By Mr. Paisley:

(2858) I don't know what percentage the sales of our company is to the total sales of this coal in Cleveland. There are many dealers that are not in the Association. There are many dealers in the Association who do not report their deliveries. I believe that, conservatively speaking, the number of dealers who are reporting their tonnages and have been reporting them a number of years are delivering between 40 and 50 per cent of the retail coal in Cleveland.

(2858) Roy S. Kern was recalled and, having been previously sworn, testified as follows:

Direct examination:

The witness: Mr. Burgess asked me yesterday to furnish the tonnage of the Bessemer & Lake Erie Freeport district coal moving to Lorain and South Lorain in 1931. The figure is 32,225 tons.

[fol. 2579] Testimony Taken at Columbus, Ohio, February 15, 1933

W. R. TRIEM was recalled and, having been previously sworn, testified further as follows:

Recross-examination.

By Mr. Martin:

(2859) All of my railroad experience has been with the Pennsylvania Railroad.

Referring to my criticism of Exhibit 146 in respect to the return of empty cars, I do not have any personal knowledge of the distribution of empty cars or the light movement of locomotives and cars on the Wheeling & Lake Erie.

(2860) I have no personal knowledge as to the number of surplus locomotives and cars on the Wheeling & Lake Erie during recent years, or as to any shortage of locomotives or cars on that railroad in that period.

I made the following statement in connection with this matter: "I cannot believe that empty cars from Cleveland, Lorain, Huron, Akron, Massillon and Canton are or can be moved with such regularity and dispatch as to make it possible to fit a theory such as is proposed in Line L, Sheet 1, applicable for the purpose of determining cost." I do not have any personal knowledge as to the regularity and dispatch with which empty cars are or can be moved over the Wheeling & Lake Erie Railway from these six destinations to the Ohio No. 8 district. I do not know how many [fol. 2580] trains move eastbound out of these destinations daily which are available for the handling empties eastbound. I do not know how many trains move out of Brewster daily which are available for the handling of empties back to the mines.

(2861) It is correct that I made the following statement in connection with this matter: "Relief must be afforded the originating terminal even though it involves the moving of two or three trains part way down the road for temporary storage. A few days later the loading district requires an abnormal amount of cars. Nothing is left to do but dispatch crews to the temporary storage point and pull in the empties. During this same period coal trains, mixed trains, local trains, all may be called upon to move an abnormal amount of traffic into a given terminal, and if the conditions obtain for longer than 48 hours there will be a succession of light engines and cabin cars with crews being rushed back to the loading point as quickly as it is possible to move them. No provision is made in these statements"—referring to Exhibit 146—"to meet conditions just described although these situations must be dealt with in ordinary railroad operation."

I don't know personally whether any of these conditions have existed on the Wheeling & Lake Erie Railway at any time during recent years. I do not know that such conditions are met with upon the W. & L. E. in ordinary railroad operations.

[fol. 2581] (2862) I do not know the extent to which cars are made empty on the River Division of the Wheeling & Lake Erie Railroad which would be available for the movement of coal westbound out of the Ohio No. 8 district. I do not know the amount of storage space for empty cars on the Wheeling & Lake Erie in Jewett Yard and in yards in the Ohio No. 8 District.

I do not understand that the calculations set out in Line L, Sheet 1 of Exhibit 146 were intended to convey the idea that during the period covered by the cost study empties were actually returned by a train handling 100 empty cars for a distance of 67 miles and stopping at that point. I shall adhere to and think the following quoted statement is correct: "this hypothetical empty train (described Line 'L', Page 1), which stops 67 miles from Cleveland, or 71 miles short of Pine Valley, has an engine on it which seemingly is dropped from consideration quite unceremoniously." (2863) In giving that testimony I did not understand there had been obtained in the items shown under "L" on Page 1, the fact, according to the testimony of Mr. Durham, that the return of empty cars was predicated upon

a calculation to show the number of gross ton miles, locomotive miles, car miles and train miles required for the movement of 48 cars from Cleveland to the mines.

[fol. 2582] As to whether I did not understand that from the statement appearing in Sub-Item 3 of Line L, as follows: "The 137,890 gross ton miles shown by the preceding item, L-2, representing the movement of 48 empty cars from Cleveland to Pine Valley would require, on the basis of 100 cars per train hour, 2,060 gross tons including caboose, the movement of a train a distance equivalent to the result obtained by dividing 137,890 gross ton miles by the 2,060 gross tons, produces 66.9 train miles—used 67."—I would say so far as train miles are concerned, I think I understood it, but so far as locomotive miles are concerned, that was the point of my criticism. In other words, it is true I was criticising this particular calculation as if it was an actual operation of 100 cars moving actually but 67 miles and stopping at that point. It was done for the purpose of pointing out the discrepancy in the locomotive miles. (2864) It is correct that it was upon that theory that I also stated that at the end of that run there would still remain 2-3/7 engines and crews to return to Pine Valley.

With reference to my statement: "We also must insist that since approximately 25 per cent of the traffic on the Wheeling & Lake Erie is unbalanced, that some account must be made of the return of power light to the coal fields."—I do not know as a matter of fact whether power is ever returned light from any of these destinations to the [fol. 2583] coal fields on the Wheeling & Lake Erie. I do not know to what extent tonnage and trains are available at these destinations for the use of this power in eastbound movement.

To sum up my tesimony, it is a fair statement that I have no first hand knowledge of operations on the Wheeling & Lake Erie Railway.

Redirect examination.

By Mr. Orcutt:

(2864) I have been in the operating department all of my railroad life.

Q. Is it conceivable to you (2865) that any carrier whose lines were constructed years ago can at the present time

be so ideal or perfectly laid out or constructed as to eliminate all operating difficulties or problems?

Mr. Martin: I object to that question, It seems to me it is irrelevant. There naturally are problems in the operation of any railroad.

Exam. Trezise: He is appearing as a witness. I think he can answer the question.

A. No, that is not possible.

(Narrative continued:) If it were possible, even then the perfect operation would be contingent upon perfectly balanced traffic. The Wheeling & Lake Erie has not perfectly balanced traffic. It is correct that if a carrier is not perfectly suited to perfect operation and it does not have that perfect operation, some or all of the difficulties I re- [fol. 2584] ferred to in my testimony must at times be encountered.

Recross-examination.

By Mr. Martin:

(2865) I have no knowledge of any instance in recent years in which these various difficulties (2866) have in fact been encountered on the Wheeling & Lake Erie.

[fol. 2585] J. E. DAVENPORT was called as a witness, and, having been duly sworn, testified as follows:

Direct examination.

By Mr. Day:

(2866) My name is J. E. Davenport. My present position is Assistant to Vice President, New York Central Railroad, 466 Lexington Avenue, New York, New York. My duties are largely of an operating nature. Other positions I have occupied in the New York Central have been Assistant to General Superintendent and Assistant General Manager, New York Terminal District, one year prior to my present position. Superintendent of River Division to approximately three years immediately prior to my appointment

to that position. My duties as superintendent of that division embraced all those which devolve usually (2867) upon a division superintendent in the operating department of a carrier.

Prior to my appointment as Division Superintendent of the River Division, I was for one year Division Superintendent of the Adirondack Division of the New York Central. Previous to the service on the Adirondack Division, I was Superintendent of Fuel and Locomotive Performance with jurisdiction over the entire road; Trainmaster, Mohawk Division, which territory extends from Albany to Syracuse; and Trainmaster on the Harlem Division which territory extends from White Plains north to Chatham, New York. My duties as Superintendent of Fuel and Locomotive Performance and as engineer of dynamometer tests covered the territory in which mines where bituminous coal [fol. 2586] is produced are located. During the course of my duties I have visited the bituminous coal mines located on the New York Central and am familiar with the methods of operation and the track lay-outs in connection with the hauls of bituminous coal from those mines. I have recently, within the past two weeks, investigated operations from its mines in Ohio to destinations in northwestern Ohio and (2868) from its Indiana-Illinois mines, making a personal investigation in Ohio No. 8 and reports for Indiana-Illinois. I am a graduate mechanical engineer, of Georgia Tech.

I was a member of an operating committee designated by the eastern carriers, defendants in Docket 23430, to visit the Duluth-Superior region and investigate the operating conditions in the territory where the so-called Holmes & Hallowell scale applied. I am also a member of an operating committee delegated by the petitioners in these proceedings to deal with certain phases of these cases on behalf of all the petitioners. The phases of the case I will deal with are: (1) Conditions surrounding the transportation of bituminous coal in what is known as the Holmes & Hallowell territory in the northwest; and (2) rebuttal of Mr. Ackerman's testimony as to tonnage ratings and tractive effort. I shall also give some evidence pertaining to the New York Central alone. As a member of the operating committee to which I first referred, it is true I accompanied other mem- [fol. 2587] bers of the (2869) committee to Duluth and

Superior for the purpose of investigating on the ground operating conditions in connection with the originating service, the assembly service of cars of coal into trains, the weighing arrangement, the types of equipment, the topography of the territory in the harbor area at Duluth and Superior from the standpoint of the transportation of bituminous coal from those points to the principal destinations covered by the Holmes & Hallowell scale, and also to look into certain other matters to which I will refer.

As a member of the operating committee I made an investigation of the terminal situation in connection with delivery of bituminous coal moving to Minneapolis and St. Paul from Duluth and Superior; and I and the other members of the committee had access to the records of the five railroads that transport bituminous coal from the head of the lakes to those cities. We also reviewed at some length the terminal operations with the operating officials of the carriers and consulted records maintained by the St. Paul and Minneapolis Associations of Commerce.

The carriers serving Duluth, Superior, Minneapolis and St. Paul were willing to assist the operating committee in make its investigation (2870); they received us very cordially and rendered every possible assistance to us.

In studying on the ground operating conditions in connection with bituminous coal traffic moved from Duluth or [fol. 2588] Superior or delivered at Minneapolis or St. Paul, our primary purpose was to ascertain whether or not existing operating conditions differ and, if so, in what respect from the operating conditions outlined by the Interstate Commerce Commission in its decisions in the Holmes & Hallowell Company Cases, 60 I. C. C. 687, 69 I. C. C. 683, 77 I. C. C., decided March 8, 1920, June 6, 1922, and March 6, 1923, respectively. Prior to the start of its investigation, the operating committee reviewed the Commission's decision referred to.

With a few minor exceptions, to which I will refer in detail later, the operating conditions in that territory are substantially the same as outlined by the Commission in its decisions in the Holmes & Hallowell Case. (2871) I have prepared some evidence in detail in substantiation of the statement I have just made.

I am also in a position to testify in a general way concerning operating conditions in connection with the trans-

portation of bituminous coal from the Ohio districts to the destinations involved in the present cases, but I would like to have it understood I make no attempt to qualify as a witness concerning the details of such operations, except insofar as the New York Central is concerned. I am familiar in a general way, however, with the transportation of bituminous coal from mines on the Pennsylvania and the Baltimore & Ohio Railroads.

I have for introduction evidence concerning the originat- [fol. 2589] ing service in connection with bituminous coal shipments at Duluth and Superior. The entire harbor area at Duluth and Superior, which (2872) are in reality one port, covers only 19 square miles and has 49 linear miles of harbor frontage, of which 6 miles are occupied by docks of which, in the aggregate, probably more are used in connection with the transportation of ore, grain and other commodities than are maintained solely for the transportation of coal.

Ten railroad lines are connected, either directly or through switching affiliations, with the docks to which I have referred; only five of them, however, are engaged in the handling of coal that moves at rates fixed by the Holmes & Hallowell scale. Those five roads are the Great Northern, Northern Pacific, C. M. St. P. & P., C. St. P. M. & O. and the Soo Line.

These five roads distribute coal directly west from Duluth and Superior through the states of Minnesota, the Dakotas, southwest to and beyond St. Paul and Minneapolis, over four separate and distinct lines—the C. M. St. P. & P., operating over tracks of the Northern Pacific on a trackage basis between Duluth and St. Paul.

There are 8 docks at Duluth and 14 at Superior over which bituminous coal is handled. Those 22 docks have an aggregate storage capacity of 12,060,000 tons.

Bituminous coal handled at these docks is received via lake steamers, graded while in process of unloading, and [fol. 2590] stored in piles on the docks to await shipment by rail to (2873) inland points.

The volume of bituminous coal and of anthracite coal hauled over these docks during the period 1896 to 1929, both inclusive, is shown in the statement which I now offer as Exhibit No. 400.

(Exhibit 400, Witness Davenport, received in evidence.)

That is the exhibit entitled "Volume of Coal Handled by Dock Companies as Compiled by U. S. War Department". The exhibit shows the source from which the information indicated thereon has been secured, namely, Report of Marine Commerce of Duluth, Minnesota, and Superior, Wisconsin, for year 1929, prepared under the direction of United States Engineer's Office, Duluth, Minnesota. This exhibit shows a great preponderance of bituminous coal movement through Duluth and Superior. In fact, for the year 1929, 96 per cent of such movement was bituminous coal. It will be noted also that the tonnage of anthracite is rapidly decreasing, whereas the tonnage of bituminous coal is increasing if the year 1927 is left out of account.

I also have for introduction as an exhibit another (2874) statement showing the volume of coal, coke and briquettes (including coal for railroad fuel) from Duluth-Superior to all points, including destinations not embraced in Holmes & Hallowell scale territory for the year 1929, by months. I offer it as Exhibit No. 401.

[fol. 2591] (Exhibit 401, Witness Davenport, received in evidence.)

The information shown on this exhibit was obtained from the Western Weighing & Inspection Bureau's Duluth headquarters. The exhibit includes both bituminous and anthracite, although it is probable that the percentage of anthracite included would not be in excess of approximately 4 per cent which is the percentage produced by the figures in my next preceding exhibit. I have no information as to the tonnage of coke and briquettes and of coal for railroad fuel included in this statement. We have no information of that character. We could not obtain it. With reference to the exhibit, it will be observed that the month of October, 1929 (2875), during which the total number of cars moved was 26,067, is a representative winter month from volume standpoint.

What can be termed the Harbor Area of the five railroads that reach Duluth and Superior and haul coal under the Holmes & Hollowell scale occupies an area of approximately 40 square miles and can be classified into seven distinct operating units, namely, on the Duluth side of the

harbor, Superior, Central Avenue, Allouez, East End and Itasca. These locations are recognized in tariffs with respect to rates applicable to bituminous coal shipped inland. Each of these operating units serves groups of coal docks and grain elevators and each constitutes a distinctive point where road trains are broken up or where outbound cars [fol. 2592] are assembled for road haul movement.

The five roads are represented by terminals and agencies from which coal is billed on each side of the harbor, either by direct lines or through switching agreements when direct trackage is not available.

I have a map showing the harbor and railroad terminal lay-out at Duluth and Superior which is published by the McGill-Warner Company and which I offer as Exhibit No. 402.

(Exhibit 402, Witness Davenport, received in evidence.)

(2876) The map was copied from a publication by McGill-Warner Company and checked generally with a similar print by the Northern Pacific Railroad and found to be substantially correct. The map shows the various coal docks, each of which is designated by the letters C D and various grain elevators which are designated by the letter E. The map (2877) also indicates the location of the principal railroad yards within the territory, the yards being indicated by bunched tracks. The principal yards are also named. The map is drawn to a scale slightly less than 1-3/4 inches to the mile and horizontal and vertical lines creating blocks are one mile square.

Bituminous coal moves through the yards marked "outbound yards". Attention is called to the fact that in many cases coal docks and grain elevators are located in close proximity.

Originating service in connection with bituminous coal [fol. 2593] from the mines in Ohio is difficult and expensive because of the fact that the tracks over which it must be assembled are, from a railroad standpoint, equivalent to the tracks which would be built in a mountainous country.

In the Ohio No. 8 fields served by the N. Y. C., bituminous coal is gathered from mines scattered over territory of about 14 miles. The assembly service has been generally described by Mr. Heimisch at Page 456 of the record. I

shall give some further testimony as to this. The tonnage from individual mines is relatively small compared with (2878) the one harbor, namely, that at Duluth and Superior, with only 22 bituminous coal docks, and as compared with the tremendous tonnage of bituminous coal that moves from the one originating point at rates fixed by the Holmes & Hallowell scale.

In the decision in the Bedford Pulp & Paper Company case, 163 I. C. C. 675, the Commission states: "It should be remembered that coal moving under that scale (Holmes & Hallowell) requires no assembling service as is usual where traffic moves from the mines."

The coal at the head of the lakes is originated over a relatively small area in what might be termed the Harbor District at Duluth and Superior, and from a railroad standpoint is a practically level territory. Therefore, light powered engines can be used at Duluth and Superior and heavy draft of cars can be handled in performing the originating service. All the docks and all the yards at (2879) those [fol. 2594] two points are in practically flat territory and there are practically no intervening grades between them.

In the Ohio fields coal originates in a rugged hilly and difficult country. I shall later describe the operating difficulties here encountered in more detail insofar as the New York Central is concerned.

I am in a position to discuss the service necessary in assembling cars of bituminous coal into trains at Duluth and Superior as compared with the Ohio bituminous fields, as to the N. Y. C. and in a general way as to other carriers serving Ohio No. 8 District. The entire railroad terminal district that represents the bituminous coal originating area insofar as the carriers that haul that commodity from Duluth and Superior at rates fixed by the Holmes & Hallowell scale are concerned approximates 40 square miles, taking into account docks, tracks, yards and all other facilities necessary for originating service, but by far the greater volume of that coal shipped by rail is confined to a much smaller area due to the close proximity of terminal yards to coal docks.

The railroad originating service (2880) incidental to getting a car of coal ready for road haul movement at Duluth and Superior consists of: First—Making up a draft of

empty cars of type ordered by Dock Company at terminal yard adjacent to dock and moving same to dock;

Second—Handling same over a scale to be weighed by Dock company employes;

[fol. 2595] Third—Handling same draft of cars when loaded over scale to be weighed by Dock Company employes and moving same to terminal yard adjacent to dock to be classified for road haul movement;

Fourth—Classification for road haul movement in terminal yard. In some instances the separation of cars for road haul movement and for puller movement is done in territory between the coal dock and the terminal yard; and,

Fifth—Puller movement between coal docks and yards of the various companies incident to forwarding cars via one railroad from docks which are switched by a second railroad. Ordinarily each of the first three services will not require more than 25 or 30 minutes of an engine's time. In many cases box cars released at grain elevators within a very short distance of coal docks are simply shifted into the dock at the head of the pier for coal loading, thus avoiding the necessity for moving assembled cars from terminal (2881) yard to coal dock. In connection with the foregoing statement reference is made to the map which I have introduced as Exhibit No. 402, showing lay-out of coal docks in close proximity to grain elevators.

In contrast, the railroad assembly service from the time the empty cars are in the classification yards to the time when the loaded cars have been made ready for road haul movement via N. Y. C. in the Ohio No. 8 field, consists of:

1. The empty cars which have been forwarded from the [fol. 2596] various sections of the railroad to the assembly yard are switched into groups for the different mine run locomotives operating from that assembly yard. Each group contains the number and types of cars which have been ordered by the individual mines to be handled by the particular mine run engine involved.

2. Movement of these drafts of cars over the railroad to mines. At the first mine encountered by the mine run locomotive the empty cars ordered for that mine are placed

on tracks known as "tail tracks." This process is continued by the mine run locomotive from mine to mine until the territory and the mines which that particular train crew and engine serve have been covered. This process covers the (2882) operation of the placing of empty cars at bituminous mines.

The third service involved in assembly covers the outbound movement from the mines of the cars and represents practically the reverse operation of the inbound (to the mine) empty movement of the cars.

In the process of picking up loaded cars in many instances switching is entailed in order to secure these loads. It is oftentimes necessary to switch out empty cars which are not loaded by the mine for various reasons. In this process in many cases, also, there is some switching at the mine proper in order to pull out the cars which are loaded and ready for movement. This process of picking up the loaded cars from mine to mine by the mine run locomotives is continued until all the mines which that particular engine [fol. 2597] and crew serves are covered. The mine run engine completes its tour by hauling these loads to the assembly yard which is the yard from which it started with the draft of empty cars.

4. As the various mine run engines and crews reach the assembly yard and have placed their draft of loaded cars on designated tracks, the assigned yard switching engines and crews handle these cars across track scales for weighing by railroad company employes and proceed with the work of classifying these loaded cars for road movement.

5. Under our operations it is necessary for the railroads serving the Ohio fields to maintain yard switching engines (2883) and crews separate and distinct from the mine run engines and crews; though mine run crews are occasionally called upon to switch empty cars, whereas, at the head of the lakes the same groups of engines and crews which serve the docks both weigh and classify these empty and loaded cars for road haul movement.

There is no comparison between the assembly service necessary at Duluth and Superior and in the Ohio bituminous fields. The services in connection with assembly in the Ohio bituminous fields is substantially greater than

at Duluth and Superior. At the head of the lakes long cuts of cars loaded with bituminous coal can be moved short distances to classification yards for assembly into trains. Based on my observation and investigation it is my opinion that the weighted average movement from the [fol. 2598] docks to the assembly yards would not exceed 4 miles. (2884) In the Ohio No. 8 fields on the New York Central, ordinarily it is necessary for the mine run engine and crew to accumulate from the mines cuts of loaded cars and handle them for about 43.4 miles before reaching the classification yards for assembly into through trains.

As a member of the operating committee, with other members of that committee, I made a canvass of the situation in regard to terminal operations in connection with the delivery of bituminous coal moving from Duluth or Superior at St. Paul and Minneapolis. I have information as to the total number of cars of coal, both bituminous and anthracite, received at St. Paul and Minneapolis during a representative period. This information is shown on a statement which is offered as Exhibit No. 403.

(Exhibit No. 403, Witness Davenport, received in evidence).

(2885) That statement entitled "Daily Average Loaded Cars Destined to and Forwarded from St. Paul and Minneapolis—Year 1929" shows the daily average loaded cars of all traffic, including coal of both kinds, destined to and forwarded from St. Paul and Minneapolis during the year 1929. The information contained thereon was secured from the records of the St. Paul and Minneapolis Associations of Commerce. It will be observed from this exhibit that the total number of loads of all traffic received at St. Paul and Minneapolis during 1929 was 529,968, of which 274,989 terminated at St. Paul and 317,979 at Minneapolis. It will [fol. 2599] be seen, also, that during 1929 the total number of loads of coal both bituminous and anthracite received at St. Paul and Minneapolis was 61,577, or 10.3 per cent of the total traffic delivered at those points during that period, of which 56,798 cars were bituminous coal and 4,779 cars were anthracite. The exhibit shows further that during October, 1929, the total number of cars of all traffic delivered at St. Paul and Minneapolis was 57,727 cars of which 5,274, or 9.1 per cent, represented coal, both bituminous and an-

thracite, and of which 4,257 cars, or 80.7 per cent, represented bituminous coal hauled from the head of the lakes to St. Paul (2886) and Minneapolis at rates fixed by the Holmes & Hallowell scale.

A study which I assisted in making shows that 39.39 per cent of the total cars of bituminous coal hauled from Duluth or Superior at rates fixed by the Holmes & Hallowell scale was delivered at Minneapolis and St. Paul during the month of October, 1929.

Nine railroads reach St. Paul and Minneapolis, viz: Chicago, Burlington & Quincy; Chicago, Great Western; Chicago, Milwaukee & St. Paul & Pacific; Chicago, Rock Island & Pacific; Chicago, St. Paul, Minneapolis & Omaha; Great Northern; Minneapolis & St. Louis; Minneapolis, St. Paul & Sault Ste. Marie; and Northern Pacific.

Five railroads operate between Duluth or Superior and the Twin Cities, viz: Great Northern; Northern Pacific, Chicago, Milwaukee, St. Paul & Pacific; Chicago, St. Paul, [fol. 2600] Minneapolis & Omaha; and the Soo Line.

I am in a position to discuss generally operations at Minneapolis and St. Paul as destination terminals to which bituminous coal moves from the head of the lakes. Each railroad has its own yards and freight terminals and liberal arrangements for exchange of switching service. The Minnesota Transfer, maintained jointly by the carriers was originally a switching line for exchange of (2887) cars between subscribing lines, whereas it is now practically a switching industrial belt line serving industries in the immediate vicinity and the carriers now make direct interchange.

The advantages which Minneapolis and St. Paul have over Cleveland, for example, is that the railroad classification yards at the former points are located on the outskirts of those two cities, and classification transfer operation between yards and between the two cities, as well as service at industries, including coal yards, public utilities, grain elevators and flour mills is performed with practically no conflict with city street traffic or traffic in adjacent highways.

Those advantages of Minneapolis and St. Paul as destination points for bituminous coal shipped from the head of the lakes over the cities in Ohio, to which bituminous coal

is shipped at the rates under attack in this case, are very substantial advantages.

The committee of which I was a member has also made [fol. 2601] a study of the movement of bituminous coal from Duluth and Superior to points in addition to St. Paul and Minneapolis, to which that commodity moves at rates found by the Holmes & Hallowell scale, and find that only small percentages of the tonnage of that coal moved to any other individual destination points, the highest percentage moving to any other (2188) points having been during October, 1929, less than 2 per cent; the two most important additional destinations, from a tonnage standpoint, having been Fargo, N. D., and Grand Forks, N. D.

Practically all of the destination points to which bituminous coal moves from the head of the lakes, under the Holmes & Hallowell scale, aside from Minneapolis and St. Paul, are small towns or cities.

The 2 per cent referred to, the highest percentage moving to any other points, having been during October. The 2 per cent is what reached Fargo and 2 more per cent Grand Fork.

I have a statement for introduction as an exhibit, tabulating the number of cars of commercial coal transported during October, 1929, from Duluth and Superior to destinations to which the Holmes & Hallowell scale of rates applies.

(Exhibit No. 404, Witness Davenport, received in evidence).

My statement covers commercial coal interchanged with other carriers after having been moved (2889) from the head of the lakes by the roads which reached Duluth and [fol. 2602] Superior. The statement covers only bituminous coal. The information shown on this exhibit was obtained from the records of the agents of the five railroads involved at Duluth and Superior. Abstracts of waybills were used for the purpose of determining the destinations to which this coal moved. As a matter of information, I have resolved the rates per net ton into rates per gross ton and have shown both rates in each instance. The published tariffs of the individual roads were used to determine the rate information covered on the exhibit. The destination as to states, of course, was shown on the

copies of the abstracts while the routing, from which was developed the information as to more than one line haul, was taken from copies of the original waybills. This exhibit covers the movement of 10,807 cars of coal under the Holmes & Hallowell scale during the month of October, 1929, from Duluth or Superior to various destinations. It shows for the various mileage blocks fixed by the Commission (2890) in its decision in the Holmes & Hallowell cases the rates per net ton and rates per gross ton. It indicates further the number of cars of coal hauled from Duluth or Superior to destinations that fall in the several distance blocks of mileage. It shows the total number of cars transported to destinations in each of the mileage blocks from those two origins. It indicates the percentage of the total number of cars transported from those two origins to destinations in each of the mileage blocks and it illustrates one line hauls and two [fol. 2603] or more line haul- from Duluth or Superior to destinations falling within each of the mileage blocks. As information, the exhibit shows in addition to the number of cars of coal carried to various cities in Minnesota, North Dakota and South Dakota at rates fixed by the Holmes & Hallowell scale during October, 1929, the number of cars of commercial coal transported during the same period from the same origins, namely, Duluth or Superior, to cities in Minnesota (iron ore ranges), Wisconsin, Michigan, Iowa, Nebraska, Montana, South Dakota (west of the Missouri River), and Canada, the total for the last seven states and Canada having been 2700 cars. The five railroads hauling coal from Duluth or Superior to the destinations covered by this exhibit are shown on the exhibit in the right hand lower corner thereon. (2891) The exhibit covers all cars of bituminous coal, or commercial bituminous coal, that moved during October, 1929. It does not include railroad supply fuel.

The columns are headed "mills." At the middle, where it starts to say "cents," is where I switched from mills to cents, on Exhibit No. 404.

Attention is directed to the fact that 75.39 per cent of the total number of cars of coal handled at rates fixed by the Holmes & Hallowell scale from Duluth or Superior, were destined to points in Minnesota, 12.20 per cent to destinations in South Dakota (East of the Missouri